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THE TRANSITION TO PARENTHOOD FOR LATE-TIMING MOTHERS: THE PROCESS OF MATERNAL ADJUSTMENT

A Dissertation Presented

by

GEORGIA GEIST MCMAHON

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

May 1992

School of Education

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ABSTRACT

THE TRANSITION TO PARENTHOOD FOR LATE-TIMING MOTHERS:

THE PROCESS OF MATERNAL ADJUSTMENT

MAY 1992

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Despite the continuing trend to delay parenthood in contemporary society, research about late-timing parenthood has been extremely limited. The purpose of this study was to examine the process of maternal adjustment for a sample of late-timing primiparous mothers.

This developmentally rooted short-term longitudinal study used both quantitative and qualitative methods. Twenty mothers, all of whom were twenty-nine years of age and older, were interviewed during the eighth month of pregnancy and again at two months postpartum. Measures of social support were administered in the prenatal period, and again in the postnatal period, along with measures of maternal self-esteem and infant temperament. Observations of mother-infant interaction and the home environment were done at two months. Qualitative data were used to develop "personal profiles".

The data show that the late-timing mothers adjusted well to new parenthood. They had positive prenatal attitudes about motherhood and demonstrated average or higher levels of maternal self-esteem. They were satisfied with the support they received, and did not feel isolated. They found their infants adaptable and unpredictable, but not difficult or dull. They were sensitive and responsive to the needs of their infants.

Results also show that maternal adjustment was influenced over time by prenatal attitudes about motherhood, infant temperament, maternal self-esteem, and the quality of the caregiving environment provided by the mother. The personal psychological resources of the mother and the temperament of the infant were most influential in determining the quality of maternal adjustment and the developing mother-infant relationship. Qualitative results show that maternal adjustment, for some, was also influenced by sources of support and stress.

Late-timing motherhood was seen as a desirable life-course choice by most of the late-timing mothers.

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INTRODUCTION

Focus of the Research

This is a short-term longitudinal study which investigates the process of maternal adjustment during the prenatal and postnatal periods for a sample of twenty late-timing mothers. The goals of this study are: (a) To describe the process of maternal adjustment in a sample of late-timing mothers, and (b) to examine the relationship between first-time late-timing motherhood and the following variables: Maternal self-esteem, the quality of the caregiving environment, maternal perception of infant temperament, and social support. Descriptive statistics and analyses of variance will be used to describe the transition period for the group as a whole and for age subgroups. Regression and correlational analyses will be used to address the hypotheses of the study. Personal profiles of individual cases will provide a qualitative view of the process of becoming a mother for a selected number of women whose profiles will be used to portray differing patterns of adjustment.

Background

There is a trend in the United States for women to delay childbirth until their late twenties and thirties

(DeVries, 1988). The phenomenon exists primarily among middle to upper class, well-educated, career-oriented married couples who are Caucasian (DeVries, 1988). In 1975, only 19% of all thirty-year-old women were childless. By the end of 1988, however, 31% of women who turned thirty that year were still childless (National Center for Health Statistics, 1990). Reasons for this trend have been linked to historical period effects including the economy, changing ideology, cultural customs and goals, and medical advances.

Easterlin (1980) proposed that the age of parents at first birth goes up when the economy is poor, as witnessed during the time of the Great Depression. During the 1970's early 1980's recessions occurred. It was during this period that many young women from the post World War II baby boom generation reached maturity, and chose to delay marriage and childbirth.

The International Bank for Reconstruction and Development (1984) found that the professional and educational status which women hold in their own culture will reflect the fertility rate and age at first birth for the mother. "The more education a woman receives in her youth, the fewer children she will bear, in part because education implies postponement of marriage, and therefore, childbearing..." Goldberg (1988, p. 8) explains.

Cross-cultural researchers Whiting and colleagues (1986) concluded that maidenhood strategies are culturally determined and vary according to the customs and parenting

goals of each individual culture. They have found that, "The age of marriage is late in post-industrial cultures with complex social organization, social stratification with achievement status, universal schooling, and positively valued higher education for women" (Whiting et al, 1986, p. 293).

DeVries (1988) and Goldberg (1988) have found that the deferment of parenthood relates to institutional patterns and policies. With little support from government and industry to provide job-protected maternity leave, and few parental paid leaves, people are likely to postpone childrearing (Goldberg, 1988). Women must put off marriage and childbirth to stay in step with institutional timetables (DeVries, 1988). "Established patterns of schooling and the flow of schooling into employment, work to delay, or in some cases eliminate parenting" (DeVries, 1988, p. 292).

Sociologist DeVries (1988) concluded that the current trend toward individualism and pursuit of individual goals has encouraged women to delay marriage and childbirth. Continued education, higher personal and professional aspirations, postponed marriage, bio-social changes such as available birth control, and feminist inspired sexual freedom outside of marriage have all contributed to an increase in births at a later age (Morris, 1988).

The trend in recent years to delay motherhood is reflected in several domains of our current culture. Women are completing more years of education, and are in positions

of responsibility in the workplace. Many have postponed marriage.

As the childless women of the '70's and '80's began to approach the age of thirty, however, they realized that time for childbearing was growing short; having a child became a goal for many. With the onset of economic prosperity in the mid-eighties, the achievement of career and personal goals, and the urge to become a mother before it was too late, the trend toward late-timing parenthood became more common.

Statement of the Problem

The literature suggests that late-timing mothers may have a difficult adjustment to parenthood due to: (a) Lack of a culturally appropriate model of motherhood (DeVries, 1988; Rossi, 1968; Rappaport, Rappaport, & Streilitz, 1977), (b) isolation from kin (DeVries, 1988; Fischer, 1988; Daniels & Weingarten, 1982), (c) lack of support from employers (DeVries, 1988; Daniels & Weingarten, 1982; Goldberg, 1988), (d) few peers bearing children (McMahon, 1989), (e) role conflicts between home and work (Daniels & Weingarten, 1982; Mercer, 1986; DeVries, 1988), (f) lack of time (Rossi, 1968; LaRossa & LaRossa, 1981), (g) lack of flexibility and adaptability of the mother (Rossi, 1987; Kach & McGhee, 1982; Entwisle & Doering, 1981), and (h) lack of spousal support in household care (Barber, 1982; Daniels & Weingarten, 1982). The data base about the transition to parenthood of late-timing mothers is not adequate to

validate these findings and, in some cases, speculations. This study will contribute to the existing knowledge of late-timing parenthood, and will reveal information not previously known about the maternal adjustment of first-time late-timing mothers.

Goals of the Study

The goals of this study are: (a) To describe the process of maternal adjustment in a sample of late-timing mothers and (b) to examine the relationship between first-time late-timing motherhood and the following variables: Maternal self-esteem, the quality of the caregiving environment, social support, and maternal perception of infant temperament. The following questions will be addressed:

1. How well prepared for motherhood are the late-timing mothers, and to what degree do they look forward to motherhood?
2. Do the late-timing mothers feel confident and competent in their new maternal role?
3. To what degree do the late-timing mothers provide a supportive home environment for their infants?
4. Do late-timing mothers perceive their infants as fussy/difficult, unpredictable, unadaptable, or dull?

5. To what degree do spouses of the late-timing mothers participate in household chores and childcare routines?

6. Do the late-timing mothers receive the type of social support they most often need? From whom?

7. Does maternal adjustment vary between older and younger mothers within the late-timing sample? In what way(s)?

8. Is there a relationship between the maternal adjustment of the late-timing mothers and infant temperament?

9. Is there a relationship between the maternal adjustment of the late-timing mothers and social support?

10. Is there a relationship between the maternal self-esteem of the late-timing mothers and the quality of the caregiving environment?

Rationale for the Research

Research about delayed parenthood began to emerge during the early 1980's, and is still in its infancy. Much of the research has concentrated on how the birth of a baby affects younger and older mothers differentially (Daniels & Weingarten, 1982; Mercer, 1986; Roosa, 1988; Ragozin et al, 1982). Role conflict emerged as a focus in some studies with late-timing mothers (Barber, 1982; Dienstag, 1987; DeVries, 1988; Mercer, 1986; Daniels & Weingarten, 1982),

while other researchers explored reasons for delaying motherhood, satisfaction with motherhood, and the expectations and experiences of late-timing mothers (Kach & McGhee, 1982). Several recent studies have utilized qualitative methodology and case study analysis to examine issues and concerns of late-timing mothers at the onset of motherhood.

This study addresses the current experience of becoming a mother at a later age. Much of the research about late-timing motherhood has used retrospective data which may not accurately reflect the actual parenting experience (Daniels & Weingarten, 1982; Morris, 1988; Schlesinger & Schlesinger, 1986).

This study brings a new focus to the research about late-timing motherhood. From a developmental perspective, using both quantitative and qualitative measures, this study will examine relationships between first-time late-timing motherhood and several variables associated with maternal adjustment. It will examine the effects of social support and infant temperament on the maternal adjustment of late-timing mothers; it will examine the effects of first-time late-timing motherhood on the quality of the caregiving environment; and it will examine the relationship between first-time late-timing motherhood and maternal self-esteem. Little is known about the relationship of these variables to first-time late-timing motherhood during the transition to parenthood.

In contrast to other studies which have examined maternal adaptation in terms of self-esteem (Roosa, 1988; Mercer, 1986), this study will investigate the maternal adjustment of late-timing mothers in terms of maternal self-esteem. A maternal self-esteem instrument more adequately assesses a new mother's feelings of competence and confidence in mothering, a construct clearly different from more general feelings of self-worth.

In contrast to other studies which have assessed the quality of the mother-infant relationship with attitudinal surveys and questionnaires (Mercer, 1986; Kach & McGhee, 1982), or through observation in a laboratory setting (Ragozin et al, 1982), this study utilizes multiple methods to assess the quality of the caregiving environment and maternal sensitivity and responsivity to infant needs: Observations of mother-infant interaction and the home environment, a questionnaire, and interviews.

Although recent research suggests that the contribution of the infant may well mediate the outcome for the mother (Bates, 1987), little is known about the role of the infant in the maternal adjustment of first-time late-timing mothers. This study examines maternal perception of infant temperament, and assesses the contribution of the infant to the maternal adjustment of the late-timing mothers in the sample. Late-timing mothers' perceptions of their infants are also compared with those of younger mothers in the norm

group of the Infant Characteristics Questionnaire (Bates et al, 1979).

In contrast to studies which have examined social support networks of younger mothers, research with late-timing mothers has been limited to research about workplace support (Daniels & Weingarten, 1982; DeVries, 1988; Barber, 1982), medical support (Holt, 1988; DeVries, 1988), public policy (Welles-Nystrom, 1988), and intergenerational support (Daniels & Weingarten, 1982; Fischer, 1988). This study will investigate multiple aspects of social support networks including intergenerational, workplace, community, friend, and spousal support.

This study examines the relationship between maternal adjustment and spousal support in the pre- and postnatal division of household labor, unlike other studies with late-timing mothers which are descriptive (Welles, 1982; Welles-Nystrom, 1989; Daniels & Weingarten, 1982; Schlesinger, Danaher, & Roberts, 1984), and/or retrospective (Barber, 1982; Schlesinger & Schlesinger, 1986).

This study utilizes both qualitative and quantitative data to describe the social support networks of the first-time late-timing mothers. Mercer (1986) recommended using qualitative research to uncover feelings of support which her structured questionnaires did not. Parke and Tinsley (1987) called for descriptive studies of how families use and profit from informal and formal network resources. The open-ended social support network questionnaire and

interviews in this study provide a thorough description of the social support network and social support needs of first-time late-timing mothers.

Driven by the developmental perspective, this study examines the maternal adjustment of late-timing mothers by viewing multiple interdependent systems over time. There are few longitudinal studies which concentrate on the maternal adjustment of late-timing mothers. Only longitudinal research can capture the developmental changes which occur for the infant, mother, father, and family during the transition to parenthood.

Summary

A decade has elapsed and there still is a lack of research from a developmental perspective about the maternal adjustment and adaptation of late-timing women. This study will describe the maternal adjustment of a sample of late-timing mothers from a developmental perspective. It will examine the relationship between first-time late-timing motherhood and a number of other variables which, it is hypothesized, will affect the transition to parenthood: Maternal self-esteem, maternal supportiveness of infant needs and the quality of the caregiving environment, maternal perception of infant temperament, and social support. Additionally, this study will compare the maternal adaptation of two subgroups of the sample: Late-timing mothers from twenty-nine to thirty-four years of age and

late-timing mothers from thirty-five to thirty-nine years-old. Multiple methods of inquiry, descriptive, correlational, and qualitative, will provide information about the adaptation of late-timing mothers which cannot be obtained using a single method.

This study makes a significant contribution to the research about the maternal adjustment of first-time late-timing mothers. It addresses questions researchers have asked about the adaptability of the late-timing mother by examining the new mother's feelings of maternal self-esteem and the quality of the caregiving environment she provides for her infant.

CHAPTER 2

A REVIEW OF THE LITERATURE

Theoretical Perspectives and the Transition to Parenthood

Research about the transition to parenthood has evolved from a variety of theoretical perspectives. The earliest perspective, the classic Psychoanalytic perspective, views the transition to parenthood as a crisis. The Sociological perspective on the other hand views new parenthood as a difficult role transition. The Bio-evolutionary Ethological Cross-cultural perspective explains the transition to parenthood as instinctual in origin and adaptive to environmental change, although influenced significantly by intergenerational patterns. Research from a Family Systems perspective examines the interaction of multiple systems within and outside of the family during the transition to parenthood. The Developmental perspective views the process of becoming a parent as a normal developmental transition which varies by context and timing.

All of these theoretical perspectives have made important contributions toward our current understanding of the initial stages of parenthood. A more detailed explanation of their contributions will follow.

The Psychoanalytic Crisis Perspective

The Psychoanalytic perspective suggests that the transition to motherhood may be experienced as a crisis. In extreme cases, psychopathology is believed to result from shattered images of the competent mother and ideal baby (Mahler et al, 1970). Much of the research representative of the so-called crisis perspective, however, has been conducted with a clinical population of women.

In the crisis perspective the mother is seen as the primary figure in her own maternal adjustment. She is the active member of the mother-infant dyad, while the infant is seen as dependent. The pathologic crisis perspective believed that genetic and unconscious predetermining factors were responsible for any abnormal attachment and interaction of mother and infant.

The transition to motherhood has also been viewed in the psychoanalytic field as a normal developmental crisis. Bibring and colleagues (1961) viewed the crisis at pregnancy as an essential part of maturational integration which varies by personality structure, adjustment, conflict resolution, life setting, and family context.

The psychoanalytic tradition considers the process of becoming a mother to be the greatest integrative task a woman will ever encounter (Benedek, 1970). At the core of this adjustment is the task of resolving former conflicts with one's own mother (Bibring et al, 1961), for the

relationship which the pregnant woman has had with her own mother is the prototype for all future relationships (Freud, 1959). If conflicts are not resolved, and are transmitted to the new mother-child relationship, frustration and pathology for the mother and possibly for the child will result (Mahler et al, 1970; Deutsch, 1945; Bibring et al, 1961; Benedek, 1970).

According to the conflict resolution view, a crisis will occur if the psychological needs of the pregnant woman are not met by her environment. In order to maintain emotional balance, the pregnant woman needs feedback from a secure marriage, affection from her husband, and support from her family of origin (Benedek, 1970).

The conflict model recognizes the importance of the marital relationship during the transition to parenthood, and it acknowledges the role of support from the family of origin (Bibring et al, 1961; Benedek, 1970). The pathological model maintains that predetermined genetic and unconscious factors are the guiding structures which either cause or prevent a crisis. The psychoanalytic tradition acknowledges that there are several factors which affect maternal adjustment including genetic and predetermined unconscious factors, maturational integration, the marital relationship, conflict resolution, and support from the spouse and family of origin. The role of the infant in the process is underestimated. Recent developments in the psychoanalytic field, however, have given greater emphasis

to the infant's contribution, and have used naturalistic observations instead of clinical reconstructions. More recent research recognizes the infant as competent (Stern, 1985), capable of mutuality (Winnicott, 1970) and communication (Bretherton, 1987). The Psychoanalytic view of maternal adjustment and recent research about the infant demonstrate that it is necessary to examine several variables which influence the maternal adjustment of late-timing mothers including spousal and family support and the role of the infant as an active participant during the transition to parenthood period.

The Sociological Perspective

Traditionally, the task of sociology has been to understand how human behavior, thought, and feeling are shaped by group life. Parenting is viewed by sociologists as a socially defined set of expectations, developed by the large society and by segments of society such as social class, ethnic group, religion, occupation, and type of community (Handel, 1970).

Alice Rossi (1968) proposed that the transition to parenthood is the major transition point in a woman's life, involving a difficult adjustment from a nonparental role to a parental role. She identified six factors which she theorized were responsible for a difficult adjustment to parenthood for first-time mothers:

1. Cultural pressure exists to become a mother. Women are taught that motherhood is necessary for self-fulfillment and for achieving adult status. Our culture encourages women to become mothers, although all women may not be ready to become mothers or have the desire or ability to parent.

2. Although a pregnancy may be unwanted, abortion is culturally unacceptable. The transition to parenthood may be especially difficult when women are pressured to have an unwanted baby.

3. Parenthood is irrevocable. The feeling of permanence and sense of responsibility which parenthood brings may be overwhelming.

4. Cultural expectations of mothers devoting themselves entirely to childrearing contrast with previous career and social life experiences. Women's personal development and self-esteem during the early and middle years of adulthood may suffer while men will continue to grow in these areas. Women are deprived of their interests during these years due to parenthood.

5. American women are not provided with enough preparation and training to take on the role of mother. They lack guidelines about how to parent. Parenting roles used to be more clearly defined when parenting was done in public places and observed first-hand.

6. Mothers live in isolated households, and do not have kin available for emotional and informational support

and guidance during the abrupt transition from childbirth to motherhood responsibilities.

Parenthood, as any social system or role, has two structural axes (Rossi, 1968). The axes in parenthood have been referred to by some as authority and support and by others as instrumentality and expressiveness. What tends to make the adjustment to parenthood more difficult than the transition to marriage, Rossi (1968) suggested, is the high percentage of instrumental activities required by the parental role. Women take on the majority of the instrumental tasks of parenting such as feeding, diapering, and bathing while men tend to be available when there are more opportunities for expressivity, especially in the form of joyful play (Rossi, 1968). Switching from an expressive early marital role to a role requiring so much instrumental activity may frustrate mothers who are naturally expressive people (Rossi, 1968).

In summary, sociologists are primarily concerned with role changes at the time a first child is born. New parents today experience many new changes simultaneously: New home, new neighborhoods, and new roles (Rossi, 1968).

Parenting roles are ambiguous. "The mothering role lacks clarity, specificity, and consensus" (Mercer, 1986, p. 2). New mothers may be isolated from their family of origin, and may need emotional and informational support and guidance as they abruptly take on the responsibilities of

motherhood. Preparation and training for the new role of mother may not be adequate.

Cultural pressures to become a mother, not to abort, and to devote oneself almost exclusively to the role of mother may have a detrimental effect on women's own personal development and sense of self-esteem. The transition from an expressive marital role to a role which requires the mother to perform a majority of the instrumental tasks of caregiving further contributes to a difficult adjustment to new parenthood.

In conclusion, the Sociological perspective has emphasized the contributions of social support and the significance of self-esteem in shaping and mediating outcomes for new mothers. Research with first-time late-timing mothers should investigate the role of social support and the role of self-esteem during the process of maternal adjustment.

The Bio-evolutionary Ethological and Cross-cultural Perspective

The Bio-evolutionary Cross-cultural perspective addresses the transition to parenthood as a form of adaptation which has evolved over time. Parent-infant interaction analysis is used by ethologists to assess maternal adjustment.

The transition to motherhood is believed to be guided by a combination of: (a) The instinctual propensities of

the newborn to attach (Bowlby, 1958), (b) internalized working models of attachment relationships or internalized memories of the parent-infant experience (Bretherton, 1987) which are transmitted intergenerationally (Bowlby, 1958), (c) appraisals by self and others (Ricks, 1985; Main, Kaplan, & Cassidy, 1985), and (d) intuitive parental response (Papousek & Papousek, 1987). This perspective recognizes that genetic tendencies guide attachment, while social conditions may foster change. The internal working model of the mother-infant relationship is adaptable and capable of reappraisal, although the model of caregiving from childhood experience is heavily relied on during the adjustment to new motherhood.

Although bio-evolutionary researchers address the possibility of attachment to others, their central focus is clearly on the mother-infant relationship and its precursor, the mother's experience as a child. Bretherton (1987) summarizes, "In a manner not fully understood at present, parents have a tendency to reenact patterns of parenting they themselves have experienced...to identify with the working model of the parent acquired in childhood" (p. 1094).

The ethological perspective recognizes the contributions of the infant during the transition to parenthood. Although new mothers may anticipate a normative model of an infant, the infant herself provides feedback to correct the model the parent is using, resulting in an

"updated, fine-tuned" working model of the new baby (Bretherton, 1987). The ability of the new mother to restructure her expectations of her baby reflects her ability to be sensitive and empathic.

The Bio-evolutionary and Cross-cultural perspective acknowledges the influence of the new mother's relationship with her own mother and the role of the infant during the adjustment period. In studies guided by this perspective, observation of mother-infant interaction often takes place in a natural setting, where communication between parent and infant is easily observed. Observation of other attachment relationships may also be observed in the home.

Ethologists recognize the bio-evolutionary origins of the parent-infant relationship, yet also acknowledge that expected parenting behaviors may change because of environmental constraints. Robert LeVine (1980) found that each culture, social class, or subculture has its own parenting formula and communication patterns which have evolved as an adaptive response to the environment. The ethological perspective assumes, however, that parental investment strategies may need revision in times of rapid social change, when customary parenting formulas will not apply.

From an ethological perspective, delayed parenthood can be viewed as an adaptive strategy, a response to environmental change, economic and ideologic. Today, in the United States, continued education, career establishment,

delayed childbirth, and two incomes are often needed in order to provide a future child with the best possible environment and resources similar to or greater than those available in the parents' families of origin.

The Bio-evolutionary and Cross-cultural perspective recognizes the bio-evolutionary origins of the mother-infant relationship and the adaptations parents make due to environmental constraints. It has provided us with the knowledge that the infant plays a central role in maternal adjustment. Research with late-timing first-time mothers should investigate the role of the infant in shaping the outcome of maternal adjustment, and recognize the importance of the cultural context.

Family Systems Perspective

The Family Systems Theory provides an extended view of the influences which affect the adjustment of first-time parents. All members of the family influence each other either directly or indirectly (Von Bertalanffy, 1967), as do systems outside of the family such as social networks (Lewis, 1987), the community, institutions, and the culture. Family systems are indeed embedded within other social systems (Bronfenbrenner, 1979).

Family Systems Theory stresses that the family is continually adjusting to the developmental shifts of its members, while roles remain flexible and interchangeable. Family systems are additionally affected by secular shifts

of historical time, including later-timed parenthood (Parke & Tinsley, 1987).

Family Systems Theory does not view the mother-infant dyad in isolation. Other sources of support and stress may have an impact upon the mother-infant relationship and influence maternal adjustment.

Sources of support and stress recognized as influential during the transition to parenthood include: (a) The mother's developmental history and childrearing philosophy, (b) spousal support, and (c) infant qualities (Nugent & Brazelton, 1989), as well as the contributions of grandparents, friends, the workplace, the community, culture, and historical time.

The greatest contribution of Family Systems Theory to the study of late-timing motherhood is the recognition that all members of the family and several systems outside of the family may directly or indirectly affect the transition to parenthood. Family Systems Theory also recognizes that the timing of parenthood may affect the family system and each member in it differentially.

The Developmental Perspective

The Developmental perspective views the transition to parenthood for adults from a life-span view, which suggests that the context and timing of parenthood may affect how men and women manage their parenthood roles. A life-span view asks: How do parents manage the tasks of self-identity,

education, career, the responsibility of parenthood, and the relationship between these tasks (Lerner & Lerner, 1987)?

This theoretical perspective, like the Family Systems Theory, recognizes that individual development is embedded in several contexts, and may operate at several levels of being simultaneously: Individual biological, individual psychological, marital, parent-infant, socio-cultural (social networks, community, society, culture), outer physical-ecological, and historical (Grossman et al, 1980).

Belsky's Developmental Process Model of Parental Functioning (Belsky, 1984) asserts that maternal functioning is multiply determined. "Supportive developmental experiences give rise to a more healthy personality, that is then capable of providing sensitive parental care which fosters optimal child development" (Belsky, 1984, p. 86). The personal psychological resources of the mother, above all, followed by contextual sources of support (especially the spouse), and characteristics of the child, in that order, serve to buffer the parent-child relationship from stress (Belsky, 1984).

The Developmental perspective asserts that the potential for change exists, that the transition to parenthood is not a static, but a dynamic phenomenon, and as such, must be viewed over time. The tacit assumption that individuals have the potential to influence their own development by shaping or selecting their own contexts recognizes that parental age at first birth can be a choice,

that individuals have differing needs for support, and that the transition to parenthood can vary from family to family, and from time to time.

The Developmental perspective views the transition to parenthood as a normal developmental change, not as a pathologic crisis. A range of variability in styles of adaptation exists within the normal range (Grossman et al, 1980). One style of adaptation is initiating parenthood in the later childbearing years. Research demonstrates that similar trends have existed in the past (Smith, 1978; Modell, Furstenberg, & Hershberg, 1976; DeVries, 1988), and in other cultures (Whiting, Burbank, & Ratner, 1986).

Of all the perspectives reviewed, the Developmental perspective best captures the multitude of influences which affect the transition to parenthood: The historical moment, individual characteristics of each parent and child, the marital relationship, infant-parent interaction, and sources of support and stress outside of the family. This perspective is especially useful for research with late-timing parents. It demonstrates the need to examine personal psychological resources of the mother, infant temperament, spousal support, the mother's social support network, the mother-infant relationship, and the interrelationship of several of these systems as they affect the maternal adjustment of late-timing women.

Perhaps the most unique contribution which the developmental perspective provides is the recognition that

developmental shifts occur in each individual system throughout the transition period. The potential for change exists as the new parents continue to adjust their lifestyles to meet their family's new developmental needs. Therefore, the process of maternal adjustment must be viewed over time.

In sum, the Developmental perspective provides the most comprehensive rationale for research with late-timing mothers. It suggests that the context and timing of parenthood may affect how men and women adjust to their new parenting roles. It demonstrates the need to look at the transition process over time, as it is a dynamic not a static phenomenon. For it is the interaction of multiple factors in each family's unique situation which contributes to the content and quality of the experience of becoming a parent. Research about the process of maternal adjustment of late-timing mothers would be greatly enhanced if guided by the developmental perspective.

Summary

All of the theoretical perspectives about the transition to parenthood have made important contributions to our understanding of the process of becoming a mother. The Psychoanalytic perspective acknowledges the period of maternal adjustment as a normative crisis and the greatest integrative task a woman will ever encounter (Benedek, 1970). It recognizes the importance of the marital

relationship and spousal and family support (Bibring et al, 1961; Benedek, 1970). The Sociological perspective recognizes the contribution of social support and the significance of self-esteem in mediating the adjustment of women to their new maternal role. Research from a Bio-evolutionary Ethological Cross-cultural perspective emphasizes the contribution of the infant and the intergenerational model of the mother-infant relationship to maternal adaptation. The Family Systems perspective recognizes that a multitude of systems within and outside of the family affect maternal adjustment, including the family, social networks, the community, institutions, and culture.

The Developmental perspective provides the most comprehensive guide for research about the maternal adjustment of late-timing mothers. It recognizes that maternal adjustment may be affected not only by individual characteristics of the parent and child, the marital relationship, and sources of support and stress, but by when, in the context of life-span tasks, a woman becomes a mother.

The most unique contribution which the Developmental perspective provides is the recognition that developmental shifts occur for each person and relationship throughout the transition period. Therefore, the process of maternal adjustment must be viewed over time. Research from a Developmental perspective can capture the dynamic nature of maternal adjustment.

In conclusion, research about the maternal adjustment of late-timing mothers would be greatly enhanced by the examination of several interdependent systems and their interaction over time. Research from a Developmental perspective can guide that process.

Research about Maternal Adjustment

The review of the research about maternal adjustment is divided into two major sections. The first section is a review of the empirical research on the transition to parenthood, with an emphasis on research which examines the relationship between maternal adjustment and the variables of social support, maternal self-esteem, infant temperament, and mother-infant interaction. The second section is a review of the research about maternal age and the transition to parenthood.

The Empirical Research about the Transition to Parenthood

Developmental studies have related the expectant and new mother's adjustment to: (a) The mother's emotional well-being (Shereshefsky & Yarrow, 1973), (b) the marital or couple relationship before and after the baby is born (Cowan et al, 1983; Cowan & Cowan, 1988), (c) the accumulation of stress and the availability of support (Shereshefsky & Yarrow, 1973; Crockenberg, 1981, 1988; Crockenberg &

McCluskey, 1986; Crnic et al, 1983), and (d) the infant and her temperament (Pedersen, 1975).

In a study by Crockenberg and McCluskey (1986), forty-eight American mothers and infants participated in a longitudinal study from pregnancy through twelve months postpartum. The researchers found that change in maternal behavior during the first year of motherhood was related to social support, initial attitudes about maternal responsiveness, and the baby's temperament.

The procedures included: (a) A prenatal maternal questionnaire used to assess maternal attitudes, beliefs, and expectations, (b) the Neonatal Behavioral Assessment Scale, (c) mother-infant observations at three months, (d) a social support interview at the time of the three month observation, and (e) The Strange Situation evaluation close to the time of the baby's first birthday.

The results of the study indicated that mothers change in their responsiveness toward their infants' cues and communications during the first year postpartum due to a complex combination of characteristics of the baby, the mother, and their social surroundings. Good social support for mothers of irritable babies was related to a more sensitive attitude toward their infants at one year. At three months, unresponsive prenatal attitudes of mothers with less irritable babies was related to less sensitivity toward infants. By twelve months, mothers of irritable infants with less responsive prenatal attitudes had become

less sensitive to their babies. Social support was an important factor influencing the degree of maternal sensitivity at twelve months, particularly for mothers with more irritable infants.

Crockenberg and McCluskey's (1986) research demonstrates the need to investigate relationships between social support, maternal perception of infant temperament, and maternal prenatal attitudes as well as the effect of prenatal attitudes on maternal responsivity to the infant at different times during the transition to parenthood.

In the landmark study by Grossman, Eichler, and Winickoff (1980), the researchers investigated the adaptation to pregnancy and parenting as a process mediated by the interaction of several domains: (a) Individual psychological, (b) individual physiological, (c) socio-cultural (dimensions such as the quality of the marriage, life stresses, and sources of support), and (d) the domain of the infant and her uniqueness (Grossman et al, 1980). Their sample included eighty-four married couples and nine other married women. Approximately half of the women were pregnant with their first child, and the others were already mothers. Most of the sample came from a middle to upper-middle class background. The study was longitudinal, beginning in the fourth month of pregnancy and ending at one year postpartum. Several measures were used to investigate each domain. Results of the study include:

1. Interpersonal supports of the mother did not make a significant difference in her adaptation to pregnancy.
2. Age was not a predictor of psychological adaptation.
3. The quality of the marriage was a strong predictor of the woman's psychological adaptation, but was a weaker predictor of maternal adjustment.
4. Infant functioning at two months was linked to stress, anxiety, and depression during the mother's early pregnancy.
5. The quality of the marriage of first-time mothers was a major predicting variable of infant functioning at two months.

Grossman and colleagues (Grossman et al, 1980) noted some limitations of their developmental research. The sample did not include women in extreme age ranges, and was representative only of middle to upper-middle socioeconomic groups. The researchers recommended developing new ways of conceptualizing and refining measurements of interpersonal support. They felt that their study did not capture the essence of interpersonal support during the prenatal period. The researchers called for further study to help clarify whether or not there is a relationship between maternal age and mothering during the early postpartum period and at one year.

Sociologists Entwisle and Doering (1981) completed a longitudinal study of first-time parenthood with a sample of one hundred and twenty mothers and sixty of their husbands. The mean age of the mothers was 24.7. Although few women in the study were over age thirty, the researchers speculated from their findings that older mothers value being in control, and may be particularly frustrated by the unpredictable demands of the infant (Entwisle & Doering, 1981).

The review of the transition to parenthood research thus far has revealed that the variables of social support, infant temperament, the mother-infant relationship, maternal self-esteem, and maternal age may mediate or influence the success of maternal adjustment. For that reason, the next section of this review will present a more detailed examination of these variables with the goal of understanding how they may influence the maternal adjustment of late-timing mothers.

The Role of Social Support

Social support has been found to be associated with better maternal adjustment and more appropriate parenting (Crockenberg, 1988). Family support, and in particular, the support of the spouse, has been found to be most predictive of appropriate parenting and the emotional well-being of the mother (Crockenberg, 1988). The type of support which most enhances the maternal-infant bond and the quality of the

home environment for the infant, however, is dependent on the needs of each individual family (Crockenberg, 1988).

Family systems do not exist and function within themselves; they are embedded in other social systems and institutions (Bronfenbrenner, 1979). The values, beliefs, and practices of the community, culture, and social network all have a profound effect on the family (Bronfenbrenner, 1979; Lewis, 1987).

Social support affects parental behavior and child development through the reduction of stress associated with household and childcare tasks and through intimate support involving love and nurturance (Crockenberg, 1988; Dunst & Trivette, 1986; Glaser, 1987; Shea & Tronick, 1982). Belsky (1981) found the marital relationship to be the primary source of support and competent parenting for new mothers. Although it has not been determined which kind and source of social support is more likely to enhance parenting practices, social support is related in the literature to more appropriate and beneficial parenting patterns, for both high and low risk samples (Crockenberg, 1988).

A social support model developed by Crockenberg (1988), illustrates the ways in which different types of social support may affect parenting behavior and child development. The model suggests that three types of support, instrumental, emotional, and informational, act in concert to support the new mother in her responsiveness toward and nurturance of her newborn.

The mother's perceived levels of stress and support during the transition to parenthood affect the quality of her interactions with her infant. Gamble and Zigler (1986) found that the quality of parent-infant attachment is related to the degree of family stress, which can have an effect on the mother's emotional availability. Crnic and colleagues (1983) found that mothers with high levels of perceived stress at one month postpartum were less responsive to their infant, and demonstrated more negative attitudes and behaviors when their infants were four months old. Social support can mollify stress and modify parent-infant interaction, thereby, making a positive contribution to the developmental outcome of infants and children (Parke & Tinsley, 1987).

Crockenberg and McCluskey (1986) found that social support is the best predictor of secure attachment between mother and infant, and is particularly important for mothers who have more irritable babies. The researchers determined that mothers who received social support during the first year postpartum and who had more irritable babies were more sensitive toward their infants than those who lacked social support. The researchers also found that maternal insensitivity at twelve months was related to a combination of maternal prenatal attitudes and the irritability of the infant during the neonatal period. This course may be altered, they predicted, with the provision of social support during the transition to parenthood.

Social support has been implicated as a critical contributor to maternal adjustment when mothers have low maternal self-esteem, when they have negative prenatal attitudes about motherhood, and if they perceive their new baby's temperament as irritable. In addition, if the mother-infant pair is already at risk, high stress and low support may have a negative impact upon the mother's behavior (Crnic et al, 1983).

Spousal Support. Research about social support and maternal adjustment has identified the spouse as a critical contributor to maternal adaptation. In this section research will be reviewed which addresses the role of the spouse in maternal adjustment and family development. Research about role flexibility and spousal participation in the division of household labor and childcare, in particular, will be reviewed.

Family systems theory suggests that family systems need to be continually adjusting to the developmental shifts of its members, whose roles must remain flexible and interchangeable (Parke & Tinsley, 1987). The transition to parenthood represents a dramatic developmental shift for couples.

A supportive relationship with one's spouse enhances family development, and in particular, the mother-infant relationship (Crnic et al, 1983; Grossman et al, 1980) during the transition to parenthood. Flexible interchangable roles in regard to household tasks may

enhance the development of the new family system, and facilitate responding to the infant's continually changing developmental needs (Fedele et al, 1988).

In a five year longitudinal study with a sample of thirty first-time mothers and fathers of working to upper middle-class backgrounds, Fedele and colleagues (1988) concluded that during the first five years of parenthood, the hallmark of adaptive families is the flexibility of roles and reciprocity of support which both new parents demonstrate in their daily living.

The researchers (Fedele et al, 1988) found that adaptation to parenthood is facilitated if new parents balance their needs for autonomy and affiliation. They defined autonomy as viewing oneself as distinct and separate from others, valuing individuality, and enjoying solitary activities. They referred to affiliation as viewing oneself as vitally connected to others, participating in and enjoying empathic and responsive relationships, while retaining a sense of uniqueness of self. Affiliation was important to the new mothers at two months postpartum, while at twelve months postpartum, mothers became more autonomous as their infants sought their own independence (Fedele et al, 1988). The results of this study suggest that mothers have differing needs for self- and other-related activities during the first year of parenthood which might be related to the developmental stages of the infant (Fedele et al, 1988). The negotiation for autonomy and affiliation between

spouses, the researchers concluded, is likely to affect spousal self-esteem and the capacity to relate to others in the family system. This research suggests that maintaining role flexibility in childcare and household responsibilities during the transition to parenthood allows mothers to respond more easily to their infants' developmental needs, and supports the mothers' own needs for affiliation and autonomy through a delicate balance of independent activities and interpersonal relationships with others.

In a longitudinal study with seventy-two expectant parents, from pregnancy through two years postpartum, Cowan and Cowan (1988) discovered that successful adaptation to parenthood lies in the couple relationship both before and after becoming parents. The division of labor in the home was the primary issue which led to marital conflict from late pregnancy to eighteen months postpartum. Parental satisfaction with the negotiation of role division was more critical to marital satisfaction than an egalitarian division of labor. Parents who were the most satisfied with their role arrangements and with their marriage, however, were those who had a less traditional division of labor and childcare. The couples were able to strike a balance between individual and couple needs at a time when attitudes about sharing family work were lagging behind the needs of contemporary living (Cowan & Cowan, 1988).

Rossi (1989, 1968) theorized that new mothers have little "downtime" and therefore, less time than fathers for

personal development and building of self-esteem through self-related activities. A scarcity of free time presents a potentially conflictual situation for new parents, sociologists LaRossa and LaRossa (1981) found in their qualitative conjoint interviews with middle-class first-time parents.

Caring for a baby is a twenty-four-hour responsibility requiring adjustment on both parents' parts. Several studies show that mothers perform far more infant-related activities than do fathers (Belsky & Volling, 1986; Dickie, 1987), and when fathers do, they spend proportionally more of this time in play activities than do mothers (Parke, 1981).

Hochschild (1989) interviewed fifty dual working couples and forty-five other individuals, and conducted in-depth observations with ten families who exemplified common patterns. Hochschild concluded that women considered themselves unusual if their husbands fully shared in the household labor. The happiest couples were those who shared household responsibilities and who communicated their appreciation of each other's contributions.

In sum, flexibility and satisfaction with roles in the division of labor in the home and childcare are critical contributors to maternal adjustment. The research suggests that satisfaction with the division of labor through negotiated childcare and household responsibilities may lead to an easier adjustment to motherhood (Cowan & Cowan, 1988).

Role flexibility may lead to greater opportunities for autonomy and affiliation (Fedele et al, 1988) which may consequently enhance the new mothers' feelings of self-worth and the mother-infant relationship.

Summary. Social support has been implicated as a critical contributor to maternal adjustment and to the development of the mother-infant relationship. Although some researchers believe that it is a combination of different types of support which makes a difference in maternal adjustment (Crockenberg, 1988), others find that maternal satisfaction and flexibility with role division is the key (Cowan & Cowan, 1988; Fedele et al, 1988).

There is little research about the role of social support in the maternal adjustment of late-timing mothers. Most of the research reviewed in this section has been conducted with mothers of traditional childbirth age.

The Role of Infant Temperament

The temperament of the infant is believed to play a critical role in maternal adjustment (Crockenberg & McCluskey, 1986; Belsky, Rovine, & Taylor, 1984; Campos et al, 1983; Kagan, 1982). Crockenberg and McCluskey (1986) found that maternal perception of infant temperament may be related to social support and prenatal attitudes of the expectant mother. In addition, they discovered that maternal insensitivity at twelve months was related to a combination of maternal prenatal attitudes and the

irritability of the infant during the neonatal period. According to Bates (1987), maternal depression, anxiety, self-esteem, and other measures of parent personality may be correlated with difficultness of temperament in the infant and young child. In some very critical ways, infant temperament contributes to the quality of the transition to parenthood for both the mother and infant.

Campos and colleagues (1983) defined temperament as "the stable individual differences in parameters of hedonic tone, arousal, and discrete emotions like anger or fear" (p. 830). Rothbart and Derryberry (1982) described temperament as constitutional differences resulting from inheritance, maturation, and experience which are visible as individual reactions to changes in the environment, and in the way an individual approaches or avoids changes.

Many researchers believe that individual differences in temperament can influence the mother-infant relationship (Campos et al, 1983; Thomas & Chess, 1977; Derryberry & Rothbart, 1984). Thomas and Chess (1977) found that the infant was often a major source of influence on the mother's behavior. Kagan (1982) suggested that temperament may play a role in shaping attachment and the continuing interactions the infant has with his or her own caregivers. Campos and colleagues (1983) found that differences in maternal and infant temperament may affect maternal-infant attachment in these ways:

1. Temperament may influence the mother's social responsiveness to the infant.
2. Infant temperament may affect the mother's assessment of the baby's or her own attachment.

Belsky, Rovine, and Taylor (1984) found that "individual differences in attachment are a function of both maternal care and potentially enduring characteristics of the infant" (p. 720). Infant fussiness or irritability prior to one month may indeed be an important factor in shaping the mothering experience and the infant-mother relationship (Belsky, Rovine, & Taylor, 1984).

Wolff (1969) found that irritability in the young infant may influence social interaction between the infant and her caregiver. The same may be true for cuddliness (Schaffer & Emerson, 1964). Infant temperament may elicit unresponsiveness and maternal insensitivity, but only after an extended period of time (Moss, 1967; Bates, 1987). "Over time...the effort involved in caring for an irritable baby may undermine the mother's capacity to remain responsive" (Crockenberg & McCluskey, 1986, p. 747).

Buss and Plomin (1984) found that infants of high emotionality are less easily consoled, have a lower threshold for aversive stimuli, and respond with distress up to two months of age. The caregiver's own temperament may determine how an infant's activity level is perceived, while

a mismatch of mother and infant sociability may create irritability for either of them (Buss & Plomin, 1984).

Although temperament has been defined in different ways by experts, mothers know that their infants have unique ways of responding to their world, present from birth. The mode of expression of this quality may vary from developmental stage to stage (Campos et al, 1983), but the intensity often lingers. Bates (1987) believes that parent perceptions of infant temperament will influence how the child is treated and how the environment is altered. Parent report questionnaires about their own experiences with their infants have great potential value (Bates, 1987).

In sum, researchers have found that temperament plays a mediating role in the development of the mother-infant relationship. Infant temperament may affect the new mother's ability to respond sensitively to her baby's needs, and, therefore, their developing attachment relationship. The research suggests that maternal perception of infant temperament and the quality of the match between maternal and infant temperament may contribute to the success of maternal adjustment and the developing attachment relationship between mother and infant.

Research about the relationship between infant temperament and maternal adjustment is in its infancy. Little is known about the relationship of these variables for late-timing mothers.

The Role of Maternal Self-esteem

Shea and Tronick (1988) believe that a mother's response to new parenthood is reflected in her sense of self-esteem, a crucial factor in determining the quality of maternal adaptation. Her self-esteem and sense of competence for mothering may be affected by the infant's alertness, habituation, cuddliness, irritability, activity level, and responsiveness to stimuli (Shea & Tronick, 1988).

A new mother's sense of self-esteem is related to seven dimensions of her feelings and experiences during the transition to parenthood (Shea & Tronick, 1988):

1. The quality of mother-child interaction and the ability of the infant to regulate interaction
2. The mother's feelings about her own competence or maternal ability (as demonstrated by her feelings of anxiety, depression, and feelings of being emotionally prepared to be a mother)
3. Acceptance of the baby: Positive feelings for the baby are related to the mother's positive feelings of herself.
4. Positive expectations of her relationship with the baby: Positive expectations are more likely to lead to positive experiences in the mother-infant interaction which then leads to more confidence in herself as a mother.
5. Feelings during pregnancy, labor, and delivery

6. Body image and health of the baby and mother after delivery

7. Parental acceptance and psychological readiness to be a parent: The ability to identify with her own mother and put aside childhood conflicts

Shea and Tronick (1988) consider maternal self-esteem to be a reflection of individual psychological development, which can be influenced by the mother's relationship with her own mother, by support from her spouse, and by her relationship with her infant. "Mothers whose self-esteem is lowered by any of a host of biosocial factors become less available emotionally to their infants and less effective with them, disturbing not only their initial adaptation and relationship, but their subsequent adaptation as well" (Shea & Tronick, 1988, p. 128). Maternal self-esteem is a measure of personality which Shea and Tronick (1988) have found to be stable at two days and four weeks postpartum.

In a study with seventy-seven primiparous and multiparous middle-lower socioeconomic class mothers of varying ages and their pre- and full-term infants of approximately forty-four weeks gestational age, McGrath (1989) administered the Maternal Self-report Inventory (Shea & Tronick, 1988) and found the following variables to be significantly related to maternal self-esteem: Maternal perception of infant health, infant medical risk status, maternal perception of the infant as fussy or unadaptable,

and neonatal assessments of the infant's regulation of state and physiological instability. Social support was not found to be related to the new mothers' feelings of self-esteem. The results of the McGrath study demonstrate that the infant plays a significant role in the development of maternal self-esteem in the neonatal period, for both pre- and full-term mother-infant dyads.

Some researchers have used measurements of the mother's self-concept such as Rosenberg's Self-esteem Scale (Rosenberg, 1965) as an alternative to a measurement of maternal self-esteem in their studies of maternal adjustment during the transition to parenthood. A self-esteem scale measures self-acceptance and feelings of personal worth, but not feelings of competence and confidence in parenting. Feelings of personal worth can be associated with life accomplishments such as career, education, income, or skills. Maternal self-esteem is related to one's perception of self in a totally different role, never experienced before by first-time mothers, which is dependent on appraisal, support from significant others, the infant's response, and several other variables. A validated maternal self-esteem instrument such as the Maternal Self-report Inventory (Shea & Tronick, 1988), more accurately assesses the adjustment of new mothers to parenthood than the Rosenberg Self-esteem Scale (Rosenberg, 1965).

Maternal self-esteem has been implicated as a powerful indicator of maternal adjustment. It can affect the

mother's relationship with her new baby and the quality of the environment she provides for the infant. Maternal self-esteem may be affected by a host of other variables also implicated in successful adaptation to motherhood: Social support, prenatal attitudes, mother-infant interaction, and characteristics of the baby among others.

Research about the maternal adjustment of late-timing mothers must include an examination of maternal self-esteem. Little is known about the role of maternal self-esteem in the maternal adjustment of late-timing mothers.

Mother-Infant Interaction

The process of maternal adjustment involves developing a sensitive and responsive relationship with the infant. Sensitivity and responsivity to the infant is reflected in mother-infant interaction and in the quality of the home environment provided for the infant during the first few months of motherhood.

Mother-infant interaction is a two-way process which involves responding to each other's communications. Successful interaction requires maternal sensitivity to infant cues. The infant provides feedback to the new mother (Bretherton, 1987), and how this feedback is perceived will affect the new mother's capacity to be sensitive and to provide warmth and nurturing. The manner in which the mother responds to the infant's cues or feedback indicates how sensitive she is toward her infant. Parental

sensitivity reflects the mother's ability to change or correct her image of the infant; it implies understanding the baby's perspective empathically (Bretherton, 1987).

Infants have innate or wired-in programs which predispose them to have competent interactions with their environment (Cramer, 1987). They are genetically biased to interact socially from birth, and if the childrearing environment is responsive to the infant's behavior signals, more mature social behaviors may be expected (Ainsworth et al, 1974).

According to Ainsworth and colleagues (1974), a responsive childrearing environment which responds sensitively to the infant's cues and communications enhances the infant's future social development. The ability of the mother to provide a sensitive home environment depends upon her successful adaptation to motherhood.

In sum, the infant is born ready to interact competently with her environment, ready to begin developing relationships with those surrounding her. Maternal sensitivity to the infant's cues and communications affects the development of the mother-infant relationship. Maternal sensitivity and responsivity to infant needs can be observed in mother-infant interaction and in other aspects of the home environment.

Research about maternal adjustment should include an assessment of the quality of the caregiving environment. There is no research with late-timing first-time mothers

which examines the relationship between maternal adjustment and the quality of mother-infant interaction.

Summary

The research reviewed in this section suggest that maternal adjustment is related to the variables of social support, maternal self-esteem, infant temperament, and the sensitivity and responsivity of the mother to her infant's needs, reflected in mother-infant interaction. Keeping these variables in mind, we will now proceed to a review of the literature about the relationship of age to maternal adjustment.

Research about Maternal Age and the Transition to Parenthood

During the early 1980's, research evolved which focused on maternal age as a variable in maternal adaptation. Initial studies compared the maternal adjustment of early and late-timing new mothers. Few have concentrated on the maternal adjustment of late-timing mothers. In this section of the literature review, studies about maternal age will be presented and reviewed with an emphasis on maternal self-esteem, social support, infant temperament, and the mother-infant relationship, variables often associated with successful maternal adaptation.

Daniels & Weingarten, 1982

A study often referred to in the literature is Sooner or Later by Daniels and Weingarten (1982). The central issue of the work was to discover the impact of timing on the experience of parenthood and to understand the significance of timing for development in adult lives (Daniels & Weingarten, 1982). The methodology was qualitative, using open-ended interviews from which salient themes were classified and hypotheses drawn. The conceptual framework of the study focused on:

1. How people decide when to have a first child;
2. The effect of the child on the marriage;
3. Family work and career work conflict for mothers;
4. The impact of family timing on fathers via integration of work and family; and
5. Becoming a father.

The initial sample included seventy-two couples representing three "mini generations" separated by ten years. Half of each mini generation became parents during their late teens through early twenties; the other half became parents during their late twenties through early thirties. An additional sample of fourteen couples initiated parenthood in their late thirties and early forties. In an attempt to capture the effect of different historical periods, several of Daniels' and Weingarten's interviews were retrospective.

The study asked, what effect does having an infant at a particular age have on the mother's life course?, but it failed to consider individual infant characteristics. There was no observation of mother-infant interaction, although the researchers found that the mother-infant relationship was enhanced by spousal support.

In sum, Daniels and Weingarten (1982) initiated research about maternal age and the transition to parenthood. The most significant contribution of their study to research about the maternal adjustment of late-timing mothers is the finding that, in late-timing families, prenatal patterns of collaboration and negotiation influence the division of labor in the home postnatally, and evolve as reciprocal sensitivity to each others' needs. The significant downfalls of the study, from a developmental point of view, are the lack of attention to the infant as a member of the family system, the failure of the researchers to look at the transition to parenthood longitudinally, the reliance on retrospective data, and the exclusive use of qualitative methods.

Ragozin et al, 1982

In 1982, Ragozin and colleagues published a developmental study entitled "Effects of Maternal Age on the Parenting Role". Several quantitative measures were used to assess maternal role performance and satisfaction. In a sample of fifty-three full-term dyads and fifty-two pre-term

dyads, with mothers ranging in age from sixteen to thirty-eight, maternal age, more than any other variable including education, was a predictor of the parenting role.

The researchers sighted limitations of their research: Homogeneity of the sample and a small number of mothers at the upper and lower ends of the childbearing age range (Ragozin et al, 1982). They also recommended extending the study longitudinally; the study did not begin during the prenatal period which sets the stage for adaptation to motherhood. Another possible drawback to the Ragozin study was the use of a structured laboratory setting as opposed to a naturalistic setting for observation of mother-infant interaction.

Welles (Nystrom), 1982

Welles-Nystrom (Welles, 1982) conducted a life-course study of maternal age and first birth in Sweden. It was a short-term longitudinal study which focused on social, psychological, and medical variables of two age cohorts. She described and compared the transition to motherhood for the two age groups.

Welles-Nystrom focused on the cultural context surrounding decision-making and reproductive patterns. She used the technique of "person-centered ethnography" (LeVine, 1982) to collect data. Interviews and pre-coded questionnaires were used at three points during the transition: (a) Late pregnancy, (b) the perinatal period,

and (c) at four months postpartum. Infant assessments occurred during the last two sessions.

Fifty-three first-time mothers participated. Twenty-seven of them were between the ages of twenty-one and twenty-nine; twenty-six were from thirty to forty years of age. The sample was matched using expected data about delivery. All mothers were from similar socioeconomic groups.

Cohort differences in individual psychological development, biomedical measures, maternal behavior and attitudes, neonatal behavior, father involvement and the division of household labor, and maternal perception of infant behavior were analyzed. Relationships were not assessed, however, between maternal adjustment and spousal support or infant characteristics.

This study initiated research about maternal age and maternal adjustment. It contributed much to the understanding of late-timing motherhood in Sweden, and to future research with late-timing mothers.

McMahon, 1989

A pilot study was conducted prior to the design of this research. The goal of a pilot study is to generate hypotheses and to validate the literature reviewed. The purpose of this pilot study was to discover the concerns or issues of early and late-timing couples during the last

trimester of their first pregnancy. The most salient theme for all participants was the need for support.

Five couples were interviewed on two different occasions using a guided interview format. The early-timing expectant parents were between the ages of twenty-two and twenty-four; the late-timing parents, between the ages of thirty-six and forty-seven. Data were gathered primarily through interviews and secondarily through observation, conversation, documents, and artifacts. Content analysis was used.

The results of the analysis revealed that emotional support which reaffirmed feelings of individual self-worth and the decision to parent was the type of support most needed by the mothers. Spousal participation in household chores was also included in the category of emotional support because mothers viewed this type of support as a form of emotional support. One expectant mother, age forty-two, who lived far from her own parents, found that she could not rely on community, workplace, or peer support to fill that gap. Spouses of late-timing mothers were often their sole confidants and providers of emotional support. Informational support about childbirth and financial support were more often needed by younger mothers than older mothers.

The late-timing mothers had concerns about balancing their careers, parenthood, and time for self. One mother, age thirty-six, said, "One of the fears or the ambivalence I

have about becoming a parent is about losing my self, putting my self on the backburner...I think what the big issue is going to be...I'm always having to do work at home...I'm just a little worried that with the baby too, that I'm going to feel much more drained with chores, and you're (to her husband) still going to feel that you have the leeway to watch a ball game or take a nap" (McMahon, 1989, Transcription A2, p. 11). A late-timing father who agreed to take the family track expressed a similar concern: "Well I know I can't do it all, and I just sometimes feel like I do an awful lot now, and then try to keep a job, and all that too. I know I can't possibly take care of a baby and do everything else I'm doing" (McMahon, 1989, Transcription B2, p. 8).

Two late-timing fathers had flexible work schedules and planned to take on some childcare responsibilities. One father commented, "I'd rather stay home actually because she is a career person...We decided that she would take the career track and I would take the family track...I have some very avant garde ideas about the kinds and degrees of training very small babies can be given so I'm really considering pursuing some of that" (McMahon, 1989, Transcription B2, p. 13). Another father planned to share childcare when the mother returned to work part-time. He said, "There is nothing I can't do while I have the baby" (McMahon, 1989, Transcription A2, p. 12).

It was clear during the prenatal interviews that the late-timing mothers and fathers alike believed that successful adaptation to new parenthood was going to require negotiation of the division of labor in the home after the baby was born. Flexibility and reciprocity during the postnatal period would allow the new parents time to balance work, parenting, and time for self. Assurance of postnatal support in the division of household labor and childcare routines was the type of emotional support which some late-timing parents needed. Others lamented that they had no one to share their feelings with other than their spouse.

A great deal of variability was found in the responses of the two age groups, and within each age group as well. Social support was identified as a key theme to investigate. The value of collecting qualitative data also became clear. The study of social support and the maternal adjustment of late-timing parents would be enhanced with the use of qualitative methods.

Late-timing Parenthood and Social Support

Little research has been done with late-timing first-time mothers which investigates the availability of social support and its relationship to maternal adjustment. Research reviewed in this section addresses the availability and adequacy of support from the spouse, the extended family, the workplace, the community, friends and neighbors, and institutions of society.

The availability of kin and the age gap between generations are both factors which may help facilitate or hinder the new mother's adjustment to parenthood (Fischer, 1988). Because of the age gap between late-timing parents and their own parents, there may be conflicting ideas about childrearing (Daniels & Weingarten, 1982); older grandparents may not feel capable of assisting in the care of a new baby. Although they may not have as much energy for involvement in their grandchildren's lives, however, retired grandparents may be more available (Fischer, 1988) than grandparents who are still in the workforce.

In a retrospective Canadian study by Schlesinger and Schlesinger (1985), with forty-six white, middle-class, well-educated couples aged, thirty to sixty years old, it was discovered that couples who had postponed parenthood lamented the lack of support from aging parents. The late-timing couples found their employers, on the other hand, to be very supportive.

The community, the workplace, and family support were all factors which related to the enjoyment of parenthood for late-timing mothers in a comparative study by Dienstag (1987) with a sample of one hundred and twenty-five middle-class first-time mothers, ages nineteen to forty.

Institutional support mechanisms are readily available to new parents, and are particularly relied on by late-timing mothers (DeVries, 1988) who are distant in time and ideology from their own mothers. Magazines, mass marketing

entrepreneurs, and the medical world can influence decisions about becoming a parent and how to parent (DeVries, 1988). Older mothers are quite susceptible to institutional influences (DeVries, 1988) because they lack guidance for the role of working mother (Rossi, 1968). Studies by Oakley (1979) and Nelson (1983) have shown that middle-class women rely more heavily on classes and books than on family for information about childbirth and parenting.

In a retrospective study with late-timing career women who had delayed parenthood, Barber (1982) found that flexible adjustable work responsibilities and time schedules, along with husbands who shared household responsibilities were very important stress reducers.

In two exploratory studies in Canada, each with a sample of ten dual career late-timing couples, Schlesinger, Danaher, and Roberts (1984) found that expectant parents relied heavily on their spouses for support. Support from extended family, neighbors, friends, and the community was lacking. Most couples felt isolated or lonely.

While research shows that support from grandparents, the community, the workplace, and institutions can be very important to late-timing mothers and not always adequate, there is a greater body of literature which indicates that the support of the spouse is related to the maternal adjustment of late-timing mothers. A review of that research follows.

Spousal Support and Late-timing Parenthood.

Research suggests that maternal adjustment and the developing mother-infant relationship is enhanced when the spouse participates in the division of labor in the home (Daniels & Weingarten, 1982). Spouses of late-timing mothers, however, are not always as helpful with household chores as they are with infant care (Barber, 1982).

Researchers have found that late-timing fathers have more flexibility, less time strain, and less conflict than mothers between family and work roles (Bloom-Feshbach, 1979; Daniels & Weingarten, 1982; McMahon, 1989; Parke & Tinsley, 1987). Having peaked in their careers, they are more involved in infant care than younger fathers, and may be able to assume a participatory role with their infants (Bloom-Feshbach, 1979), thereby relieving some of the stress late-timing mothers feel.

In a retrospective exploratory study with thirty-five married career women, twenty-eight years of age and older, Barber (1982) found that late-timing fathers participated in infant care, but did not often share traditional household tasks. Seventy-one percent of the husbands in Barber's study did not participate in household tasks, although eighty-six percent of them expressed egalitarian attitudes about house and childcare.

In a retrospective study with late-timing mothers ages thirty through sixty, Schlesinger and Schlesinger (1986) found that most women do the major childrearing and

homemaking chores. Dual working couples, however, tended to discuss and negotiate their home roles.

Longitudinal research by Welles-Nystrom (Welles, 1982) with fifty-three first-time mothers ages twenty to forty, indicated that infant care is shared by both parents in Sweden. The younger group of couples shared household tasks during pregnancy more equally than the older couples. Older couples tended to divide household chores and infant care by skill and did not rotate them. Welles-Nystrom attributed the differences in role flexibility to the historical time. The younger couples came of age at a time when government policy began to encourage father participation in the home; nurturance in men was gaining public acceptance.

In her multimethodological longitudinal research about maternal adaptation, Mercer (1986) found that older first-time mothers received more support from their mates than from anyone else. The support they received was primarily emotional support in the form of reassurance of personal worth.

In qualitative open-ended interviews involving a representative sample of eighty-six white couples from three different age cohorts of early, late, and mid-life first-time parents, Daniels and Weingarten (1982) found that preparental patterns of collaboration, reciprocity, and power influenced the division of labor in the home after the first child's birth, particularly for the late-timing cohort. Older mothers who had the power of pay and

professional careers before children, had residual power to influence, negotiate, and insist, whether or not they used it, or whether or not they were working (Daniels & Weingarten, 1982).

Daniels and Weingarten (1982) found that preparental collaboration and negotiation evolved in parenthood as a reciprocal sensitivity to spousal needs. Meeting a spouse's emotional needs strengthens the mother's resources to "engage, nurture, and care for a child" (Daniels & Weingarten, 1982). When emotional needs are met the mother feels that her daily experience is understood (Daniels & Weingarten, 1982). This can be accomplished in part by a more egalitarian participation in household responsibilities, childcare, and nurturing (Daniels & Weingarten, 1982).

The research indicates that a relationship exists between spousal support and maternal adjustment. It is not clear, however, what type of spousal support is most critical to the maternal adjustment of late-timing mothers. Daniels and Weingarten (1982) suggested that a negotiated division of labor sets the stage for the emotional well-being of the mother, which in turn leads to a more sensitive and responsive relationship with her infant. Research with late-timing mothers should assess the relationship between spousal support and maternal adjustment, to discover what type of support is related to successful maternal adaptation.

In sum, there are few studies which examine the relationship between late-timing first-time motherhood and social support from the spouse, parents, friends, neighbors, the workplace, and institutions within the community. The research which has been done is primarily qualitative or retrospective. This review of late-timing studies demonstrates the need for longitudinal research about the relationship between social support and the maternal adjustment of late-timing women.

Late-timing Parenthood and Infant Temperament

There a few studies with late-timing mothers which investigate infant temperament. Studies which do investigate infant temperament compare younger and older mothers' ratings of their infants.

In a comparative longitudinal study with mothers of varying ages, Mercer (1986) compared maternal ratings of infant temperament using the Carey Infant Temperament Questionnaire (Carey, 1970) at four, eight, and twelve months. Mercer found that older mothers tended to rate their infants lower in persistence and intensity than younger mothers, but higher in threshold to stimulus, approach to new objects, and adaptability. Mercer cautioned, however, that the Carey Infant Temperament Questionnaire may assess maternal characteristics and attitudes in addition to infant temperament.

Welles-Nystrom (Welles, 1982) compared younger and older mothers' perceptions of their infants at four months of age, and found no significant differences in ratings of difficult temperament. Older mothers, however, tended to rate their infants as "less easy" than the younger mothers.

In sum, few studies with late-timing mothers have assessed the relationship between infant temperament and maternal adjustment. Future research with late-timing mothers should investigate the role of infant temperament in that process.

Late-timing Parenthood, Mother-Infant Interaction, and the Mother-Infant Relationship

Research which assesses mother-child interaction suggests that older mothers encourage and value responsivity in their infants, are more actively involved with their children, and are more flexible and adaptive than younger mothers.

In a comparative study of maternal role attainment in new mothers ranging in ages from fifteen to forty-two, Mercer (1986) found that flexibility increases with maternal age. A validated perinatal rigidity instrument indicated that older mothers will potentially respond less rigidly toward their infants, and a measurement of temperament found them more adaptable than younger mothers. As their infants grew, Mercer found that older mothers were more accepting of increased infant activity than were the two younger age

groups; they highly valued their infants' responsivity. Several of Mercer's measures validated these findings.

In a study with one hundred mothers and fathers of middle-class background, whose average maternal age was 28.8, Ventura (1982) found that parents' perceptions of their parenting abilities were significantly related to the way they coped with their two-month-olds. Late-timing parents were better able to cope with their newborns; they were less anxious and depressed. Anxious, depressed parents viewed their infants as less soothable and more distressed. Older, higher SES parents in this study sought less social support and self-development activity, which were positively associated with depression and anxiety.

Ragozin and colleagues (Ragozin et al, 1982) observed mother-infant interaction with a sample of well-educated, predominantly Caucasian first-time mothers of varying ages and their four-month-old infants. The observation session took place in a laboratory setting and was divided into three segments: (a) A ten minute unstructured session where the mothers were told to "pretend you are at home with your baby", (b) a five minute semi-structured session where they were asked to elicit vocal responses from their infants, and (c) a three minute structured session where mothers were told to imitate their babies. Sessions were videotaped in a small laboratory where a table, chair, and a few toys were present. The researchers found that older mothers interacted with their infants in a qualitatively different

way, eliciting more vocal and imitative responses than younger mothers. A strong positive relationship between maternal age and positive affect was discovered in this sample of first-time mothers.

Research by Richardson (1982) with parents and children (not necessarily infants) of varying ages and birth order, revealed findings similar to those of Ragozin (Ragozin et al, 1982). In a series of four different one-and-a-half hour in-home observation sessions with fifty-two mother-child and father-child dyads, parents were directed to participate in a construction activity, a skill activity, and a discussion with their child. Richardson found that being an older mother was significantly related to higher rates of positive attention to and interaction with her child.

Although the research suggests that late-timing mothers interact in a qualitatively different way with their children than younger mothers, there are no studies with late-timing mothers which assess the quality of mother-infant interaction and the quality of the infant's home environment through observation during the early infancy period. Information about mother-infant interaction involving late-timing mothers has been gathered through self-report questionnaires, open-ended interviews, or in observation settings with mothers of varying ages whose infants are four-months of age or older.

The quality of mother-infant interaction and the home environment for the infant can be more accurately assessed in a naturalistic setting, the home.

Late-timing Parenthood and Maternal Self-esteem

Few studies about the maternal adjustment of late-timing mothers have utilized a measure of maternal self-esteem. Some researchers have used a measure of general self-esteem, which is related to maternal self-esteem, but this is a separate distinct construct (Shea & Tronick, 1988).

In a comparative study of maternal age differences during the transition to parenthood, Roosa (1988) administered Rosenberg's Self-esteem Scale (Rosenberg, 1965) to a cross-section sample of sixty-four primarily white middle-class mothers of differing ages. Roosa (1988) found no significant differences in prenatal self-perceptions of self-esteem for the two age groups of mothers.

Roosa used a self-esteem scale, not a measure of maternal self-esteem. Research about the maternal adjustment of late-timing mothers is incomplete without a measure of maternal self-esteem.

Summary of Maternal Age Research

Researchers have begun to address the relationship between maternal age and maternal adjustment, as recommended by Grossman and colleagues (1980) and Ragozin and co-researchers (1982). Daniels and Weingarten (1982) and

Welles-Nystrom (Welles, 1982) have initiated research about the late-timing experience.

Research with late-timing mothers is still in its infancy, and there remains much to be discovered about the maternal adjustment of late-timing mothers. Little is known about the role of social support and the role of infant temperament in the maternal adjustment of late-timing mothers. In addition, little is known about the degree to which maternal self-esteem may influence the transition to parenthood of late-timing mothers. More is known about the quality of interaction between late-timing mothers and their infants, although not during the early infancy period. Little is known about the quality of the home environment provided for the infant during the first few months of life. These areas have not been adequately addressed in the research about late-timing first-time parents. Research is needed which describes the process of maternal adjustment from pre- to postnatal periods for late-timing mothers, and which assesses the relationship between maternal adjustment and the variables of maternal self-esteem, infant temperament, social support, and the quality of the caregiving environment.

Summary of the Research about Maternal Adjustment

The literature has been reviewed on the transition to parenthood, on maternal age and the transition to parenthood, and in four discrete areas which have been

associated with maternal adjustment: (a) Maternal self-esteem, (b) social support, (c) infant temperament, and (d) the quality of mother-infant interaction and the caregiving environment. Although these variables have been implicated in successful adaptation to new motherhood, few have been adequately addressed in the literature about late-timing parenthood.

Data about late-timing parenthood have been gathered primarily through comparative age group studies. Studies with late-timing mothers alone have often been qualitative. There are no studies which focus on the maternal adjustment of late-timing mothers and combine descriptive and correlational data gathered through quantitative and qualitative methods in a pre- and postnatal longitudinal design, which this study will do.

Goals of the Study

The pilot study and the review of the literature have guided the development of the goals, questions, and methodology of this study. Specifically, the goals of this study are:

1. To describe the process of maternal adjustment in a sample of late-timing mothers
2. To examine the relationship between first-time late-timing motherhood and the following variables: Maternal self-esteem, the quality of the caregiving

environment, social support, and maternal perception of infant temperament.

Research Questions

Now that the literature about maternal adjustment has been reviewed and the goals of the study defined, it is appropriate to review the questions which will be addressed by this study:

1. How well-prepared for motherhood are the late-timing mothers and to what degree do they look forward to motherhood?
2. Do the late-timing mothers feel confident and competent in their new maternal role?
3. To what degree do the late-timing mothers provide a supportive home environment for their infants?
4. Do the late-timing mothers perceive their infants as fussy/difficult, unpredictable, unadaptable, or dull?
5. To what degree do spouses of late-timing mothers participate in household chores and childcare routines?
6. Do the late-timing mothers receive the type of social support they most often need? From whom?
7. Does maternal adjustment vary between older and younger women within a late-timing sample? If so, in what ways?

8. Is there a relationship between the maternal adjustment of the late-timing mothers and infant temperament?

9. Is there a relationship between the maternal adjustment of the late-timing mothers and social support?

10. Is there a relationship between the maternal self-esteem of late-timing mothers and the quality of the caregiving environment?

Definition of Terms

Late-timing Mothers: A consensual definition of late-timing motherhood does not exist (Bloom, 1984). Several studies of maternal age refer to the age of twenty-eight as late-timing (Roosa, 1988). The age of twenty-eight was selected as a boundary for this research, although all mothers were twenty-nine years of age or older when they gave birth. Late-timing mothers are often referred to in the literature as delayers, postponers, mature, and older mothers.

Transition to Parenthood: In the literature, the transition to parenthood usually refers to the period from late pregnancy through the first year postpartum. This study is concerned with and refers to the transition to parenthood as the period of time from the last trimester of pregnancy through the second month postpartum.

Maternal Adjustment: In this study, maternal adjustment is defined as a two-part structure: (a) Maternal self-esteem, and (b) maternal supportiveness of the infant's social, cognitive, and emotional needs, further defined as the quality of the caregiving environment at two months postpartum. Maternal adjustment will be measured using the Maternal Self-report Inventory and the Home Observation for Measurement of the Environment.

Maternal Self-esteem: Feelings of confidence and competence as a mother

The Caregiving Environment: Maternal interaction and involvement with the infant, sensitivity and responsivity to the emotional needs of the infant, and the provision of age-appropriate experiences for the infant

Infant Temperament: Enduring qualities of the infant present from birth; the ways in which the infant approaches his social world

Social Support: Emotional, instrumental, and/or informational support

Social Support Network: People who provide what the mother considers to be helpful support, usually parents, spouse, in-laws, siblings, friends, co-workers, and medical personnel

Household Division of Labor: Household chores traditionally considered female responsibilities

Childcare Routines: Caretaking tasks and opportunities for interaction with the infant

Older Late-timing Mothers: Ages 35 and older

Younger Late-timing Mothers: Ages 29-34

Early Infancy Period: Approximately two months postpartum

Comprehensiveness of Support: A measure which combines maternal perception of the helpfulness and frequency of support

CHAPTER 3

METHODS AND PROCEDURES

The Sample

The criteria for participating in this study included: Being married and not separated, being age twenty-eight years of age or older, being a first-time mother, not having carried a baby beyond three months in a previous pregnancy, and not having attempted for more than three consecutive years to conceive.

Access to most of the participants was gained through the help of hospital childbirth instructors. Eleven of the twenty participants were approached by the director of childbirth instruction at a teaching hospital associated with a prominent New England college. Seven mothers volunteered for the study after participating in a discussion with the researcher at community hospital childbirth classes. Two women were referred by a friend or relative.

The sample was composed of twenty married women between the ages of twenty-nine and thirty-nine who were expecting their first child. All of the women and their husbands lived in rural areas of northern New England, although most had not been raised in the region. All were Caucasian but two; one mother was Afro-American and the other had been born and raised in China.

All of the mothers were either employed or studying for advanced degrees prior to the birth of their infant. All but three planned to return to work within four months of childbirth. Sixteen of the pregnancies were planned; four were not. The four unplanned pregnancies occurred to mothers between the ages of twenty-nine and thirty-four years of age.

The socioeconomic status of the sample was primarily middle-class, with one mother located in the uppermost social class category on the Hollingshead Factor Index of Social Position (Hollingshead & Redlich, 1958). The criteria on which class assignment was based included: Education, occupation, and residence, with occupation having a higher factor weight than residence or education.

All of the infants weighed at least five-and-a-half pounds at birth and were delivered within two weeks of term. Twenty-five percent of the births were cesarian-section deliveries; three of the seven mothers in the older age group delivered by c-section. All infants at eight weeks were healthy, despite two being born with an RH blood factor complication and one whose umbilical cord was causing distress in-utero.

Demographic characteristics of the sample are listed in Table 1.

Table 1. Demographic Characteristics of the Sample

Demographic characteristics		Maternal Age 29-39 (N=20)	29-34 (n=13)	35-39 (n=7)
Mothers' mean age		32.8	30.6	36.9
Fathers' mean age		34.7	33.15	37.57
[a] Social class	I (highest)	1	0	1
	II	11	8	3
	III (middle)	8	5	3
	IV	0	0	0
	V (lowest)	0	0	0
Infants	Male	9	5	4 [b]
	Female	11	8 [c]	3 [d]

[a] Social class assignment was based on residence, occupation, and education (Hollingshead & Redlich, 1958). [b] Two deliveries were c-section; [c] Two deliveries were c-section; [d] One delivery was c-section.

The sample was divided into two age subgroups to gain a clearer understanding of the process of maternal adjustment within this late-timing age group. It was felt that the process could differ between women who are as young as twenty-nine and those who are thirty-five and older, due to individual development, career involvement, possible medical intervention, and historical period effects. Some of the women entered adulthood during two different historical periods: The early 1970's and the early 1980's. The younger group was composed of thirteen mothers, ages twenty-nine through thirty-four, and the older group included seven

mothers, ages thirty-five through thirty-nine. The entire sample participated in the pre- and postnatal sections of the study. Occasionally, a questionnaire was incomplete or incorrectly filled out, accounting for an "n" lower than twenty.

Instruments

Prenatal assessments took place on the average at 8.13 months. Postnatal inquiry occurred between two and three months postpartum, most often when the infant was eight-weeks-old. Journals were kept by some mothers continuously throughout the pre- and postnatal periods.

The following questionnaires were administered shortly after the prenatal interview: The Demographic Questionnaire, the Prenatal Social Support Network Questionnaire (Crockenberg, 1981), and the Division of Household Labor Questionnaire (Welles, 1982). The following questionnaires were completed shortly after the postnatal interview: The Postnatal Social Support Network Questionnaire (Crockenberg, 1981), The Division of Household Labor Questionnaire (Welles, 1982), The Childcare Routines Questionnaire (Welles, 1982), The Infant Characteristics Questionnaire (Bates et al, 1979), and The Maternal Self-report Inventory (Shea & Tronick, 1988). The Home Observation for Measurement of the Environment (Caldwell & Bradley, 1978) was completed concurrently with the postnatal

interview. The schedule of assessments is listed in table 2.

Table 2. Schedule of Assessments

Prenatal period (mean: 8.13 months)	Postnatal period (7-10 weeks)
Prenatal Interview	Postnatal Interview
Demographic Questionnaire	Home Observation for Measurement of the Environment (Caldwell & Bradley, 1978)
	Maternal Self-report Inventory (Short Form) (Shea & Tronick, 1988)
Prenatal Social Support Network Questionnaire (Crockenberg, 1981)	Postnatal Social Support Network Questionnaire (Crockenberg, 1981)
Division of Household Labor Questionnaire (Welles, 1982)	Division of Household Labor Questionnaire (Welles, 1982)
	Childcare Routines Questionnaire (Welles, 1982)
	Infant Characteristics Questionnaire (Bates et al, 1979)
Journal	Journal

Prenatal Instruments

Journal

The mothers were asked to record their attitudes and experiences about pregnancy, childbirth, and parenthood in their journal. Suggested themes included social support, the infant, feelings about being a mother, and any other thoughts the mothers felt they would like to share. The

journal was used in the analysis of qualitative data for some of the women in the personal profiles.

Demographic Questionnaire

A demographic questionnaire was left with each expectant mother to complete at the end of the first interview. It provided descriptive data about the family of origin, education, employment, socioeconomic status, biomedical information, and preparation for birth and parenting. A copy is located in the appendix.

Prenatal Interview

Each mother was interviewed usually in the home for approximately one-and-a-half hours during the last trimester of pregnancy, most often during the eighth month. The interview was semi-structured and consisted of both open-ended and quantifiable questions about the transition to parenthood.

Specifically, the interview examined the following content areas: (a) Demographics, (b) social support, (c) division of labor in the home, (d) prenatal attitudes about motherhood, (e) postnatal expectations, and (f) the experience of being a late-timing mother. Questions about social support and prenatal attitudes about motherhood were rated by the expectant mothers on Likert-type scales from a low score of one to a high of four or five.

The interviews were tape-recorded with permission, allowing the researcher to be more attentive to the

participants, and to capture information and intonations which note-taking cannot. A copy is located in the appendix.

The Prenatal Social Support Network Questionnaire

This questionnaire, developed by Crockenberg (1981), examines several aspects of the mothers' social support network: (a) The number of people in the network, (b) what type of support the mother received, (c) how often support was received, and (d) who was the most helpful source of social support. Expectant mothers listed people who had been the most helpful within the previous four week period, and described their support. They rated the frequency of each person's support on a seven point scale from 1, "not helpful at all" to 7, "helpful often every day".

Network members were then divided into categories of spouse, parents, in-laws, siblings, friends, and others.

The scoring was recoded to reflect the number of times a week each of the network people were helpful. The category "often every day" was ambiguous and, therefore, eliminated. Network members rated in the category "often every day" were instead rated "helpful once a day". The total score for frequency of help was computed for each mother's network by summing the mean frequency of help scores for each network category. The sample's mean total score for frequency of support was used in data analysis.

Division of Household Labor Questionnaire

This questionnaire, developed by B. Welles-Nystrom (Welles, 1982; Welles-Nystrom, 1989), was adapted for use with this sample. In this study the questionnaire was used to describe the percentage of spousal participation in household chores pre- and postnatally. The data were also used to address hypotheses about the role of spousal support in the maternal adjustment of the late-timing mothers.

The six items on the questionnaire most frequently reported by the participants were selected for analysis. These included: Washing dishes, cleaning, grocery shopping, preparing food, washing clothes, and paying bills. The first five of these items are often considered to be traditional female role responsibilities (Baruch & Barnett, 1981).

Each mother recorded the number of minutes per week she and her spouse each participated in the specific household chores. Minutes were tallied for each spouse. The spouse's participation was evaluated using the mean male ratio score which represents the time spouses spent doing household chores compared to the total amount of time the couple spent doing the same chores during a week.

A copy of this questionnaire is located in the appendix.

Postnatal Instruments

Journal (See description in prenatal section.)

Postnatal Interview

The postnatal interviews were all conducted in the homes of the new mothers at approximately eight weeks postpartum. The interview was guided, and the questions were all open-ended. The interview included some questions shared by other researchers (Welles-Nystrom, 1989; Nugent, Greene, & Mazor, 1992; and Grossman et al, 1980).

The interview included content areas of: (a) Labor and delivery, (b) social support, (c) the division of labor in the home, (d) maternal perception of the infant, (e) feelings about self as a mother, (f) the experience of being a late-timing mother, and (g) employment and childcare.

The postnatal interviews were used only for personal profiles. A copy of the postnatal interview is located in the appendix.

The Maternal Self-report Inventory

This questionnaire, developed by Shea and Tronick (1988), was filled out by the new mothers at approximately eight weeks postpartum. It is a measure of the mother's emotional well-being in relation to her feelings of maternal self-esteem (Shea & Tronick, 1988). As such, the Maternal

Self-report Inventory is a measure of the new mother's adjustment to parenthood at two months postpartum.

Shea and Tronick (1988) applied Cronbach analysis, a reliability analysis, to the original seven dimensions of the MSI to reduce the number of items. External validation was used as a criterion to retain items. The resulting twenty-six item MSI Short Form is composed of the subscales of: (a) Caretaking ability (alpha = .83; six items), (b) general ability and preparedness of the mother (alpha = .88; eight items), (c) acceptance of the baby (alpha = .81; four items), (d) expected relationship with the baby (alpha = .66; four items), and (e) feelings about pregnancy, labor, and delivery (alpha = .89; four items).

Mothers rated items on Likert scales of one to five, from "completely false" to "completely true". Items from all five dimensions were scattered randomly throughout the questionnaire.

Test-Retest Reliability: A Pearson Product Moment Reliability coefficient of $\underline{r} = .85$, $\underline{p} < .0001$ was reported at one week and one month. A normal distribution of scores around the mean occurred at both time 1, two days after birth, and at time 2, one month after birth (Shea, 1982). The MSI was so stable at one week and one month that it is generalizable beyond one month; the age of the infant shouldn't matter (Shea & Tronick, 1988). The stability between assessment periods could also indicate that maternal self-esteem is more a function of the mother's personality

than anything else; it is not easily affected by immediate circumstances (Shea & Tronick, 1988).

Validity: Concurrent validity was established between the MSI and a general measure of self-esteem, the Epstein and O'Brien Self-report Inventory (1976), with a significant correlation of $r = .74$, $p < .001$. A lower, but still significant correlation of $r = .35$, $p < .02$ was found between MSI scores and a clinical assessment of maternal self-esteem (Shea, 1984).

Construct validity was obtained with correlations between the MSI and a defensiveness scale developed by Shea and Tronick (1988). The correlations were fairly low on all subscales ranging from $r = -.05$, $p < .39$ for body image to $r = .57$, $p = .01$ for health after delivery.

Inter-item correlations established internal validity. The homogeneity coefficients ranged from $r = .66$, relationship with baby, to $r = .89$, general ability as a mother (Shea & Tronick, 1988). McGrath (1989) also obtained an acceptable level of internal consistency on the MSI, with an alpha coefficient of .88.

Construct validity was also established through correlations of the MSI with theoretically derived independent variables: Infant health status, family support, maternal health, separation, infant sex, feeding problems, maternal bothersome score, and maternal sensitivity, perception and attitudes, and concerns (Shea & Tronick, 1988; Shea, 1984).

This instrument has high reliability, face validity, concurrent validity, and construct validity. External validity between the MSI and other independent measures varied, but for the most part, was substantial (Shea & Tronick, 1988).

For data analysis, the mean of the mothers' total raw scores was used. A copy of this instrument is located in the appendix.

The Postnatal Social Support Network Questionnaire

This questionnaire, developed by Crockenberg (1981), was adapted for use in this study in order to better capture maternal attitudes about social support. Items were added to the questionnaire which were not included in the original design of the study.

The questionnaire was filled out by the new mothers at approximately eight weeks postpartum. The mothers recorded the following information about their social support networks: (a) People who provided helpful support during the postnatal period, (b) a description of the support each person provided, (c) how often that support was received, (d) how helpful that support was, (e) the most helpful person in the network, (f) the type of support the mother needed most, and (g) whether the mother received the support she needed most. Mothers rated the frequency of support on a scale from 1 to 7, from "not at all" to "often every day".

Mothers rated helpfulness of support on a scale from 1 to 5, from "not helpful at all" to "extremely helpful".

As in the prenatal questionnaire, the scoring was recoded to reflect the number of times per week each network person provided support, and the rating "often every day" was eliminated and replaced by the rating "helpful once a day".

Network members were divided into categories of spouse, parents, in-laws, siblings, friends, and others. A frequency of support score and a helpfulness of support score were calculated for each network category, and for the total network. A comprehensive support score for individual network members was calculated by multiplying the frequency of support rating by the helpfulness of support rating. The mean of the individual comprehensive support scores for each category was recorded as the comprehensive support score for that category. A comprehensive support score for each mother's entire network was calculated by summing the mean comprehensive support scores of all network categories.

Ratings for adequacy of social support were coded on a scale of 0 to 3, according to maternal response to the question, "Did you receive the support you needed?" (0 = inadequate support; 1 = somewhat adequate support; 2 = adequate support; and 3 = more than adequate support).

Mean network and mean category scores for (a) frequency of support, (b) helpfulness of support, (c) comprehensiveness of support, and (d) adequacy of support

were used in data analysis. A copy of this questionnaire is located in the appendix.

Division of Household Labor Questionnaire (See the prenatal section.)

Childcare Routines Questionnaire

This questionnaire was developed by Barbara Welles-Nystrom (Welles, 1982; Welles-Nystrom, 1989), and has been adapted for use in this study. Six items on the questionnaire were deleted from quantitative analysis. Several mothers replied that these items did not apply to their situation, and the deleted items were often reported in a format other than time. The deleted items include: Feed with bottle, take for walks in carriage, talk with baby, take baby to doctor, pick up baby when crying in middle of night, and "other".

Mothers recorded how many minutes each day they and their spouse each participated in the selected routines. The selected routines were also classified into categories of instrumental and relational routines. Instrumental routines are often viewed as caretaking tasks. Routines classified as instrumental in this study include: Bathing baby, putting baby to bed at night, changing wet or dirty diapers, burping baby, picking up baby when crying during the day, and dressing baby in the morning and evening. Relational tasks are playful and interactive. The items

designated as relational for this analysis are: Playing with baby, singing to baby, and reading to baby.

Spousal participation in childcare routines is described using the mean male ratio score. This score represents the amount of time a spouse spent participating in daily childcare routines compared to the amount of time spent on the routines by both mother and father. Mean male ratio scores were also calculated for instrumental and relational childcare routines. A copy of this instrument is located in the appendix.

Infant Characteristics Questionnaire

This questionnaire was developed by Bates and colleagues (Bates et al, 1979) for the purpose of assessing the construct of difficult temperament. It measures parent perceptions of infant behavior in four discrete areas:

1. Fussiness/Difficultness (in soothability)
2. Unadaptability (reactions to new events, things, people)
3. Dullness (social responsiveness and activity level; i.e. more active infants are perceived as more sociable.)
4. Unpredictability (of hunger, diaper change, etc.)

Mothers rated their infants on 28 items, using a seven point scale where the midpoint of 4 was considered "about average".

Reliability: The ICQ has adequate reliability in test-retest periods, and demonstrates cross-validated internal consistency. Test-retest reliability (N=112) for the four factors are: (a) Fussy-Difficult, .70; (b) Unadaptable, .54; (c) Dull, .57; and (d) Unpredictable, .47. Factor I, Fussy-Difficult, is the most valid factor for the 6-month version (Bates et al, 1979).

Validity: The questionnaire shows convergence with the Carey Survey of Temperamental Characteristics (Carey, 1970); mother and father ratings of their baby have also displayed convergence. In addition, mothers' interpretations of the items are accurate, as indicated by their descriptive interview data (Bates et al, 1979). Bates and colleagues (1979) believe that the high return rate for the questionnaire more than makes up for its brevity.

Norms for the four factors of the ICQ were established for sixth month, thirteen month, and twenty-four month-old infants. In this study, the new mothers rated their infants at approximately eight weeks.

In this study, the mean total and factor raw scores were used to describe maternal perception of infant temperament and to assess the relationship between infant temperament and the variables of maternal self-esteem and the quality of the caregiving environment. Sample questions from this questionnaire are located in the appendix.

The Home Observation for Measurement of the Environment

This instrument, developed by Caldwell and Bradley (1978), was used in this study as a measure of the quality of the caregiving environment at approximately two months postpartum. It was designed to measure the quantity and quality of social, emotional, and cognitive support which the mother provides. The Home Observation for the Measurement of the Environment is one of two most widely used measures of family environment (Plomin, 1987). All forty-five items address maternal behavior.

Reliability: The internal consistency of the subscales ranges from coefficients of .44 to .89, with a total scale internal consistency coefficient of .89 (Elardo, Bradley, & Caldwell, 1977). The stability of the scale was found to be consistent (r=.62) between the six and twenty-four month scores. Interrater reliability has ranged from 75% to 94.6% in a number of studies (Elardo & Bradley, 1981).

Validity: Substantial relations were found between the HOME score and children's mental test scores throughout the preschool years during the ten year longitudinal Little Rock Study (Bradley, 1981).

In this study, observations of mother-infant interaction and the home environment lasted approximately one hour. Data which was not easily obtained through observation was gathered by interview. Observations and

interview data were classified into one of six categories or factors:

I. Emotional and Verbal Responsivity of the Mother (11 items)

II. Avoidance of Restriction and Punishment (8 items)

III. Organization of the Environment (6 items)

IV. Provision of Appropriate Play Material (9 items)

V. Maternal Involvement with the Child (6 items)

VI. Opportunities for Variety in Daily Stimulation (5 items)

Each item was evaluated by the researcher and recorded with a "yes" or "no" response. Positive responses were summed and recorded by category. The summary of category scores comprised the total raw score for each mother. The mean total raw score was used to: (a) Describe maternal sensitivity and responsivity to infant needs at eight weeks, and (b) to assess relationships between this maternal variable and the variables of maternal self-esteem, social support, and maternal perception of infant temperament. A copy of this instrument is located in the appendix.

Summary of Data Reduction for Quantitative Instruments

Prenatal Interview

Means and standard deviations derived from Likert-type scales were used to describe couple and maternal readiness

for parenthood, preparation for the baby, feelings of looking forward to motherhood, and social support. High scores on these items indicate very positive prenatal attitudes about becoming a parent or about social support received during the prenatal period.

The Home Observation for Measurement of the Environment

Data were reduced to mean cluster and total raw scores. A high mean score represents a caregiving environment rich in appropriate supportiveness of the infant's emotional, social, and cognitive needs.

The Maternal Self-report Inventory

Data were reduced to the mean total raw score. A high score represents positive feelings of maternal self-esteem.

The Social Support Network Questionnaire

Data from the prenatal questionnaire were reduced to mean category and network scores for frequency of support. Additional questions on the postnatal questionnaire allowed data to be additionally reduced to mean category and network scores for adequacy of support, helpfulness of support, and comprehensiveness of social support. A high score represents more adequate, more frequent, more helpful, or more comprehensive (frequent and helpful) social support.

Division of Household Labor and Childcare Routines Questionnaires

For both questionnaires, the data were reduced to mean male ratio scores for the total group and for age groups. This score represents the average amount of time spouses spent doing chores or childcare routines compared to the total amount of time spent by both mothers and fathers. Mean male ratio scores were also computed for instrumental and relational childcare routines. A high score represents a high percentage of spousal participation in any of these areas.

Infant Characteristics Questionnaire

Data were reduced to a mean total raw score and to mean factor raw scores. A high mean score for individual factors indicates that mothers perceived their infants as extremely (a) fussy/difficult, (b) unadaptable, (c) unpredictable, or (d) dull. A high mean total raw score indicates that mothers perceived their infants to have a combination of these temperamental qualities.

Data Analysis

A combination of quantitative and qualitative methods were used for data gathering and data analysis in an effort to capture the dynamic process of the transition to parenthood. The quantitative data were used to structure the analysis, describe results, address hypotheses, and

relate trends. The qualitative data were used to develop a portrait of the process of becoming a mother for individuals who represent different styles of maternal adaptation. A description of qualitative data analysis will be presented first, followed by a description of quantitative analysis and hypotheses used to test research questions.

Qualitative Data Analysis

Personal profiles of four mothers representing a range of patterns of maternal adjustment were developed using qualitative techniques. Qualitative research can capture and vividly describe multiple styles of maternal adaptation throughout the transition to parenthood. With the use of profiles, this study acknowledges individual differences in maternal adjustment.

The purpose of this study is two-fold: (a) To describe the process of maternal adjustment for the late-timing mothers and (b) to examine relationships between first-time late-timing motherhood and maternal self-esteem, the quality of the caregiving environment, maternal perception of infant temperament, and social support. Qualitative techniques are sensitive and adaptable to mutually shaping influences (Lincoln & Guba, 1985) such as social support, maternal perception of infant temperament, and maternal self-esteem. They are adaptable to the multiple (styles) realities (Lincoln & Guba, 1985) of maternal adaptation described in the personal profiles.

Qualitative researchers use inductive data analysis techniques. Through inductive analysis, the researcher is able to capture multiple realities (Lincoln & Guba, 1985), in this case, the variability in maternal perception of the process of maternal adjustment.

The data in the personal profiles is interpreted according to individual cases. Theory is allowed to emerge from the data; the data is not bound by theory. Results unrelated to original hypotheses are able to be recorded.

In qualitative research, the researcher is the only research instrument. The person as a research instrument can grasp and evaluate interaction (Lincoln & Guba, 1985); he can probe, clarify, follow up, and ask for elaboration. Interviews are guided not only by the agenda on the interview form, but by additional information gathered during the interview process. Accuracy of interpretation is established through in-depth description of the setting, the process, the group, the individual, and the interaction (Lincoln & Guba, 1985). Researcher insight and interpersonal trust with the participant aid the researcher in gaining access to the truth (Marshall & Rossman, 1989).

Bias in interpretation is avoided in several ways: Through critical analysis by others, by looking for negative cases, by thoroughly reviewing the data and testing rival hypotheses, through value-free note taking, and by the guidance of other researchers familiar with the methodology (Marshall & Rossman, 1989). When the interpretation of the

data is agreed to be correct by both researcher and participant, credibility has been established (Lincoln & Guba, 1985).

The availability of data from several sources lends credibility to the interpretation. Parent report and researcher observations create a set of checks and balances (Parke, 1978). Through triangulating data from different sources the researcher will be able to "corroborate, elaborate, and illuminate" the findings (Marshall & Rossman, 1989, p. 146), and the study's transferability or usefulness in other settings will be strengthened (Marshall & Rossman, 1989).

Researchers of family systems believe that qualitative methods will unearth aspects of relationships which quantitative measures cannot. Mercer (1986) felt that a qualitative research approach would have uncovered the subtle changes in mate relationships which women in her study were hesitant to document. Gottlieb and Pancer (1988) believe that qualitative descriptive research will disclose supportive and stressful interactions new parents have with people in their social network. Goodnow (1984) described parent beliefs and attitudes as the "missing link in their accounts of parent-infant relations" (p. 193). Different approaches may be suitable depending on the kind of information being sought.

The shift to viewing families from a developmental perspective has been accompanied by a shift in

methodological approach, "a strong commitment to a multimethodological strategy" (Parke & Tinsley, 1987, p. 581). The developmental perspective traditionally uses empirical methods of discovery, though a pluralism of methods is becoming quite common (Parke & Tinsley, 1987). This developmental study uses multiple methods to achieve a much richer understanding of the process of maternal adjustment for late-timing mothers.

Content Analysis of the Qualitative Data

Only the qualitative data of mothers selected for personal profiles has been analyzed. The qualitative data gathered from interviews and observations were classified into the following categories (Marshall & Rossman, 1989): (a) Social support, (b) maternal perception of infant characteristics, (c) maternal self-esteem, and (d) quality of the caregiving environment. These categories were selected to coordinate with the goals of the study and were also selected based on the results of a qualitative pilot study and a review of the literature in the field. As new themes and patterns emerged from the data, they were also identified and the data classified. Conclusions were developed about the maternal adjustment of the individual women based on the themes and patterns identified in their own personal profiles.

Hypotheses or conclusions which emerged from the profiles were tested using all available data about the

mother: Demographic data, data from questionnaires, interview data, observational data, conversation, and journals. Member checks (confirmation with the mothers) were done during the interviews to confirm researcher interpretation.

Quantitative Data Analysis

In keeping with the goals of the study, these procedures were utilized for reduction and analysis of the quantitative data: Descriptive statistics, correlational analysis, analysis of variance, and bivariate and multiple regression analysis. Descriptive statistics were used to describe maternal adjustment over time of the total sample and age subgroups. Analysis of variance was used in comparing the maternal adjustment of the two age groups on some measures. Correlational analysis was used to examine relationships between maternal adjustment and the variables of social support and infant temperament. Regression analysis was used to address the hypotheses and to further examine the relative contributions of the different variables to maternal adjustment.

Descriptive Statistics

Measures of central tendency such as the mean describe data in a form which can be quickly and easily reported (Welkowitz et al, 1982). Standard deviations indicate how widespread are the scores in a distribution. Means and

standard deviations are used in this study to describe the process of maternal adjustment of the late-timing mothers.

The following research questions will be addressed using descriptive statistics:

1. How well prepared for motherhood are the late-timing mothers, and to what degree do they look forward to becoming mothers?
2. Do the late-timing mothers feel confident and competent in their new maternal role?
3. To what degree do the late-timing mothers provide a supportive home environment for their infant?
4. Do the late-timing mothers perceive their infants as fussy/difficult, unpredictable, unadaptable, or dull?
5. To what degree does the spouse participate in household chores and childcare routines?
6. Do the late-timing mothers receive the type of social support they most often need and from whom?

Analysis of Variance

Research question #7 (Does maternal adjustment vary between older and younger mothers within the late-timing sample?) will be addressed using analysis of variance techniques.

An analysis of variance technique referred to as ANOVA is a statistical technique which compares sample means

simultaneously and discloses whether or not there is a statistically significant difference somewhere in the data. It assesses the variability between and within groups, yielding an F-ratio. In this study, a one-way ANOVA analysis of variance is used to compare age group means for the variable, comprehensive support of the spouse on the postnatal Social Support Network Questionnaire. This technique is also used to compare the frequency of prenatal support for the two age groups.

T-tests for two sample means were used in this study to compare the maternal adjustment of younger and older age subgroups of the sample on most measures. They were also used to compare sample means of the total late-timing sample and the norm groups of the Infant Characteristics Questionnaire and the Home Observation for Measurement of the Environment. Mean scores of a Rhode Island sample on the Maternal Self-report Inventory were also compared to the late-timing mothers' mean score using t-tests.

The following research questions will be addressed using correlational and regression analysis:

8. Is there a relationship between the maternal adjustment of the late-timing mothers and infant temperament?

9. Is there a relationship between the maternal adjustment of the late-timing mothers and social support?

10. Is there a relationship between the maternal self-esteem of the late-timing mothers and the quality of the caregiving environment?

Correlational Analysis

The Pearson r correlation coefficient is a particularly appropriate statistic to use for describing the relationship between two variables (Welkowitz et al, 1982). While the r indicates the strength of the linear relationship between the variables, the r squared correlational coefficient indicates the strength of the relationship with a percentile figure.

Correlations were initially used in this study to test relationships between maternal self-esteem, the quality of the caregiving environment, maternal perception of infant temperament, and spousal support and the helpfulness of the mothers' postnatal social support network, with fourteen mothers. Due to the sample size, the decision was made to proceed with bivariate regression analysis to discover relationships which might be significant at the .05 level of significance.

Regression Analysis

Both multiple and bivariant regression analyses were used in this study to assess relationships between variables.

Bivariant regression analysis is used to assess the relationship between two variables. It is more flexible,

more understandable, and easier to expand than simple correlational analysis. It is used in this study to assess hypothesized relationships.

Multiple regression analysis is a powerful tool which assesses the relationship between a criterion measure (a dependent variable) and a weighted combination of two or more predictor or independent variables. It has been widely used in computer applications and is the method of choice when dealing with multiple variables (Isaac & Michael, 1990). Stepwise multiple regression reveals the weight each independent variable contributes to an outcome variable.

In this study, multiple regression analysis was performed after all bivariate regressions were complete and research questions answered. The purpose of doing a multiple regression analysis at this point was to validate the findings of bivariate regression analysis and to discover the relative weight which each of the independent variables, helpfulness of the mother's social support and infant fussiness, contributed to maternal self-esteem.

Hypotheses of the Study

Hypotheses of the study were derived from the original research questions, and were all tested initially by means of simple correlations and later using regression analysis.

In chapter 4, we will look at question #8, Is there a relationship between the maternal adjustment of the late-timing mothers and infant temperament?, in two ways:

Hypothesis 8a: There is a significant relationship in a negative direction between maternal self-esteem as assessed by the Maternal Self-report Inventory and maternal perception of infant temperament as assessed by the Infant Characteristics Questionnaire in the early infancy period.

Hypothesis 8b: There is a significant relationship in a negative direction between the quality of the caregiving environment in the early infancy period, as assessed by the Home Observation for Measurement of the Environment, and maternal perception of infant temperament, as assessed by the Infant Characteristics Questionnaire.

We will look at the question #9, Is there a relationship between the maternal adjustment of late-timing mothers and social support?, in four ways, with four separate hypotheses:

Hypothesis 9a: There is a significant relationship in a positive direction between prenatal spousal support, as assessed by the Division of Household Labor Questionnaire, and maternal self-esteem, as assessed by the Maternal Self-report Inventory, at two months postpartum.

Hypothesis 9b: There is a significant relationship in a positive direction between the quality of the caregiving environment, as assessed by the Home Observation for Measurement of the Environment, in the early infancy period,

and postnatal spousal support, as assessed by the Division of Household Labor Questionnaire.

Hypothesis 9c: There is a significant relationship in a positive direction between maternal self-esteem, as assessed by the Maternal Self-report Inventory, and helpfulness (comprehensiveness) of support, as assessed by the Postnatal Social Support Network Questionnaire, at two months postpartum.

Hypothesis 9d: There is a significant relationship in a positive direction between the quality of the caregiving environment as assessed by the Home Observation for Measurement of the Environment, and the helpfulness of support, as assessed by the Postnatal Social Support Network Questionnaire, at two months postpartum.

We will look at question #10, Is there a relationship between the maternal self-esteem of the late-timing mothers and the quality of the caregiving environment?, in this way:

Hypothesis 10: There is a significant relationship in a positive direction between maternal self-esteem, as assessed by the Maternal Self-report Inventory, and the quality of the caregiving environment, as assessed by the Home Observation for Measurement of the Environment, in the early infancy period.

In Chapter Four, the process of maternal adjustment for a sample of twenty late-timing mothers will be described. The results of the hypotheses will disclose relationships between late-timing motherhood and the variables of maternal self-esteem, the quality of the caregiving environment, maternal perception of infant temperament, and social support. In Chapter Five, the qualitative data will be used to describe the maternal adjustment of four late-timing mothers and the variables which were associated with their maternal adjustment.

CHAPTER 4

QUANTITATIVE RESULTS

In this chapter, the research questions and their corresponding hypotheses will be addressed, and the quantitative results of the study presented. The quantitative results will be presented in three ways: Descriptive results, results of the hypotheses, and results of multiple regression. Results of post hoc analyses will also be reviewed.

Descriptive Results

Research Question #1: Prenatal Attitudes about Motherhood

How well prepared for motherhood are the late-timing mothers, and to what degree do they look forward to becoming mothers?

Table 3 shows maternal self-ratings from Likert-type scales on four measures of prenatal attitudes about motherhood: Couple readiness for parenthood, maternal readiness for parenthood, looking forward to motherhood, and feeling prepared for the baby. Table 3 shows that 90% of the expectant mothers responded that their marital relationship was ready for parenthood. All mothers in the younger age group felt that their marital relationship was ready, while only 71.5% of the mothers in the older group felt this way. The variability between age subgroups on

this prenatal attitude was not significant ($F = 4.29$, $t = 1.46$, $df = 7.54$, $p = .185$).

Table 3 also shows that 95% of the late-timing mothers rated themselves at least "ready for motherhood". Only one mother rated herself less than ready to become a mother; she was a member of the older subgroup of mothers.

Table 3 shows that approximately 95% of the expectant mothers were looking forward to motherhood. There was no significant difference between age groups on this prenatal attitude ($F = 4.43$, $t = .05$, $df = 7.61$, $p = .962$).

85% of the late-timing mothers felt prepared for the baby. 92% of the younger mothers and 71.43% of the older mothers felt prepared. This difference was not significant ($F = 1.77$, $t = 1.75$, $df = 18$, $p = .097$).

In sum, 95% of the late-timing mothers felt ready and looked forward to becoming mothers. 90% felt that their couple relationship was ready for parenthood, and 85% felt prepared for the baby. Prenatal attitudes about readiness for, looking forward to, and preparation for the baby did not differ significantly by age group, although younger mothers tended to feel more prepared.

Table 3. Maternal Ratings of Prenatal Attitudes about Motherhood

Interview question	Rating		% of mothers and ratings: 29-39 years (N=20)	29-34 years (n=13)	35-39 years (n=7)
How ready	not ready	1	10	0	28.5
are you as		2	0	0	0
a couple	ready	3	15	23	0
to become		4	60	54	71.5
parents?	more than ready	5	15	23	0
How ready	not ready	1	0	0	0
are you		2	5	0	14
to become	ready	3	30	23	43
a parent?		4	45	54	43
	more than ready	5	20	23	0
How do	not looking forward	1	0	0	0
you feel		2	5.26	0	14.28
about	looking forward	3	10.52	8.33	14.28
becoming		4	47.37	66.66	14.28
a mother?	extremely excited	5	36.84	25	57.14
How	not at all	1	0	0	0
prepared		2	15	7.7	28.57
do you	prepared enough	3	35	23.07	57.14
feel for		4	40	61.54	0
the baby?	too prepared	5	10	7.7	14.29

Research Question #2: Maternal Self-esteem

Do the late-timing mothers feel confident and competent in their new maternal role?

Table 4 shows that there is a wide range of variability in mean maternal self-esteem scores on the Maternal Self-report Inventory at two months postpartum, especially among the older subgroup of the late-timing mothers. Mean scores ranged from 66 to 128, out of a possible high score of 130. The mean score for the sample was 108.50. T-tests reported in table 4 show that mean scores of younger and older age subgroups were not significantly different ($F = 2.15$, $t = .87$, $df = 18$, $p = .396$).

The late-timing mothers' scores were compared with those of a Providence, Rhode Island sample of new and experienced mothers of varying ages, who were married, mostly Caucasian, and from middle to lower socioeconomic groups (McGrath, 1989). T-tests revealed that the late-timing mothers had significantly higher maternal self-esteem than the total Rhode Island sample ($T = 12.2015$, $df = 95$, $p < .05$). When pre-term infants were factored out, however, the differences disappeared. No significant difference in maternal self-esteem was found between the late-timing mothers and the full-term subgroup of the Rhode Island sample. Table 4 shows the results of the MSI for the Rhode Island and late-timing samples and subgroups.

Table 4. A Comparison of Results of the Maternal Self-report Inventory (Shea & Tronick, 1988) for the Late-timing Mothers and the Rhode Island Sample (McGrath, 1989)

Group	N	Range	Mean	S. D.
Late-timing sample, 29-39 yr.	20	66-128	[a] 108.50	16.32
29-34 years	13	76-125	[b] 110.846	13.96
35-39 years	7	66-128	[b] 104.143	20.49
R. I. sample	77	75-130	[a] 102.935	11.56
R. I. full-term subsample	36	90-130	109.52	10.13

[a] Means are significantly different ($t = 12.2015$, $df = 95$, $p < .05$). [b] Means are not significantly different ($F = 2.15$, $t = .87$, $df = 18$, $p = .396$)

Research Question #3: The Quality of the Caregiving Environment

To what degree do the late-timing mothers provide a supportive home environment for their infants?

T-test results in table 5 reveal that all mean factor scores and the mean total raw score of the HOME Inventory were significantly different for the late-timing sample and for the norm group of the HOME Inventory. Table 5 shows that the late-timing sample had significantly higher mean scores (at the .05 level of significance) than the norm group on all factors but one. These factors were: Factor I, Emotional and verbal responsivity of the mother; Factor II, Avoidance of restriction and punishment; Factor III, Organization of the environment; Factor V, Maternal involvement with the child; and Factor VI, Opportunities for

variety in daily routines. The norm group scored significantly higher on Factor IV, the Provision of appropriate play materials.

Table 5. T-test Results for the Late-timing Sample and the Norm Group on the Home Observation for Measurement of the Environment (Caldwell and Bradley, 1978)

Factor		t value	df	p
I:	Emotional and verbal responsivity	4.57	142	<.05
II:	Avoidance of restriction and punishment	5.81	142	<.05
III:	Organization of the environment	3.92	142	<.05
IV:	Appropriate play material	2.11	142	<.05
V:	Maternal involvement	2.02	142	<.05
VI:	Variety in daily routines	3.96	142	<.05
Mean total score		3.38	142	<.05

Table 6 shows a comparison of mean factor and mean total raw scores on the HOME Inventory for the sample of late-timing mothers, for age subgroups, and for the norm group of the HOME.

Table 6. A Comparison of Mean Scores of the Late-timing Sample and the Norm Group of the Home Observation for Measurement of the Environment (Caldwell & Bradley, 1978)

	Entire Late-timing sample (N=20)		Norm group (N=124)		Late-timers 29-34 years (n=13)		Late-timers 35-39 years (n=7)	
Factor	Mean	SD	Mean	SD	Mean	SD	Mean	SD
I:	10.20	1.11	7.8	2.3	10.23	.92	10.14	1.46
II:	7.50	.83	5.5	1.5	7.54	.88	7.43	.79
III:	5.10	.72	4.8	1.2	5.31	.63	4.71	.76
IV:	4.90	1.12	6.1	2.5	4.77	1.09	5.14	1.22
V:	4.75	1.41	3.4	1.7	5.00	1.15	4.29	1.80
VI:	3.90	.72	2.8	1.3	4.08	.76	3.57	.53
Total	36.35	3.95	30.4	7.7	36.92	3.47	35.29	4.82

Note. Factor I: Emotional and verbal responsivity of mother. Factor II: Avoidance of restriction and punishment. Factor III: Organization of the environment. Factor IV: Provision of appropriate play materials. Factor V: Maternal involvement with the child. Factor VI: Variety in daily routines.

In sum, the late-timing mothers provided a significantly different caregiving environment than norm group mothers did ($t = 3.38$, $df = 142$, $p < .05$). It can be concluded that they were significantly more supportive of their infants' needs. The late-timing sample scored significantly higher than the norm group on all factors but one, the provision of appropriate play material. Mean total scores for the age subgroups of the late-timing sample were not significantly different ($t = .88$, $df = 18$, $p = .391$), leading to the conclusion that the quality of the caregiving

environment did not differ by age within the late-timing sample.

The results of this questionnaire must be viewed with caution. Although the HOME was developed for use with children from birth to age three, it was standardized based on a sample of families with infants ranging in age from eight to thirteen months.

Research Question #4: Maternal Perception of Infant Temperament

Do the late-timing mothers perceive their infants as fussy/difficult, unpredictable, unadaptable, or dull?

Table 7 shows a comparison of mean scores on the ICQ for the entire sample of late-timing mothers, for age subgroups, and for the norm group of the ICQ. Comparisons must be treated with caution as the ICQ was standardized based on a sample of six-month-old infants, and is especially relevant for parents of infants from four to seven months (Bates, 1984).

Table 7 shows that the norm group had a higher total mean ICQ score than the sample of late-timing mothers. T-tests reported in table 8 reveal that mean scores differed significantly on Factor III, dull ($t = 12.64$, $df = 340$, $p < .05$), and on Factor IV, unpredictable ($t = -2.88$, $df = 340$, $p < .05$), for the late-timing mothers and the norm group. In other words, the late-timing mothers perceived

their infants as significantly less dull and significantly more unpredictable than the norm group mothers.

T-tests on table 9 show that maternal perception of infant temperament did not vary significantly between age groups on any of the four mean factors or mean total scores. Factor II, unadaptable, showed the most variance between age groups, using the separate variance estimate ($t = 1.98$, $df = 17.64$, $p = .063$). Younger mothers more than older mothers in the late-timing sample tended to view their infants as unadaptable.

Table 7. A Comparison of Mean Scores of the Late-timing Sample and the Norm Group of the Infant Characteristics Questionnaire (Bates et al, 1979)

	Entire Late-timing group (N=20)		Norm group (N=322)		Late-timers 29-34 years (n=13)		Late-timers 35-39 years (n=7)	
Factor	Mean	SD	Mean	SD	Mean	SD	Mean	SD
I	18.10	5.33	17.77	5.88	18.00	5.90	18.29	4.50
II	8.00	3.04	8.90	4.00	8.77	3.42	6.57	1.51
III	.45	2.09	5.88	1.85	.15	2.05	1.00	2.16
IV	9.10	2.43	7.32	2.69	8.70	2.63	9.86	1.95
Total	35.65	8.88	39.87		35.62	9.88	35.71	7.36

Note. Factor I is fussy-difficult. Factor II is unadaptable. Factor III is dull. Factor IV is unpredictable.

Table 8. T-Test Results for the Late-timing Sample and the Norm Group of the Infant Characteristics Questionnaire (Bates et al, 1979)

Factor		t value	df	p
I:	Fussy-difficult	.2447	340	>.05
II:	Unadaptable	.9880	340	>.05
III:	Dull	12.6400	340	<.05
IV:	Unpredictable	2.8863	340	<.05

Table 9. T-Test Results for Age Groups of the Late-timing Sample on the Infant Characteristics Questionnaire (Bates et al, 1979)

Factor		t value	df	p
I:	Fussy-difficult	-.11	18	.913
II:	Unadaptable	1.98	17.64	.063
III:	Dull	-.86	18	.402
IV:	Unpredictable	-1.03	18	.319

In sum, t-tests show that the late-timing mothers did not view their infants as especially difficult or unadaptable, but they did view them as significantly less dull and significantly more unpredictable (at the .05 level of significance) than the norm group of the ICQ. T-tests also revealed that there were no significant differences between age groups of the late-timing sample on any factor of the ICQ, although there was a trend for younger mothers to perceive their infants as more unadaptable than older mothers perceived theirs ($t = 1.98$, $df = 17.64$, $p = .063$).

Research Question #5: Instrumental Spousal Support

To what degree does the spouse participate in household chores and childcare routines?

Table 10 shows that the spouses of the late-timing women contributed an average of twenty-nine percent of the labor for the selected household chores, as indicated on the Prenatal Division of Household Labor Questionnaire (Welles, 1982). There was much variability in the range of scores, from a low of two percent to a high of sixty-three percent spousal participation.

Table 10 also shows that the spouses of the older subgroup contributed a higher percentage of time to household tasks than the husbands of the younger women, but this difference was not significant ($t = -1.70$, $df = 14$, $p = .111$).

Table 10. Percentage of Time Spouses Participated in the Prenatal Division of Household Labor

Group	n	Mean % of time spouses participated	S. D.	Range
Total group	16	29	18	2-63
29-34 years	10	24	17	2-44
35-39 years	6	38	17	14-63

Note. There was no significant difference between age groups ($t = -1.70$, $df = 14$, $p = .111$).

Table 11 shows that seven of the twenty expectant mothers expected their spouses to participate in fifty

percent or more of postnatal household work, while six of the women expected their husbands to participate in twenty-nine percent or less of the postnatal workload. The mean prenatal expectation of spousal participation in the postnatal division of household labor was 38.68%, a higher percentage of participation than in the prenatal period (29%).

Table 11. Prenatal Expectations of Spousal Participation in the Postnatal Division of Household Labor

% of time of anticipated spousal help	Total group (N=20)	29-34 years (n=13)	35-39 years (n=7)
50% or more	x x x x x x x	x x x x	x x x
40 to 49%	x x x x x	x x x x	x
30 to 39%	x x	x	x
20 to 29%	x x x x x	x x x	x x
10 to 19%	x	x	

Note. x = one person.

Table 12 shows that the mean percentage of spousal participation in the postnatal division of household labor was 30%, as indicated on the Postnatal Division of Household Labor Questionnaire (Welles, 1982). There was little variation between age subgroups.

Table 12. Percentage of Time Spouses Participated in the Postnatal Division of Household Labor

Group	n	Mean % of time spouses participated	S. D.	Range
Total Group	20	30	22	4-67
29-34 years	13	31	24	0-63
35-39 years	7	30	22	11-67

Table 13 shows that from prenatal to postnatal periods, the mean percentage of spousal participation in the division of household labor changed from 29 to 30%. Prenatally, the mothers had anticipated that their spouses would participate in 38.68% of the postnatal household work.

Although the mean percentage of spousal participation remained relatively constant from pre- to postnatal periods, table 13 reveals that a shift in the mean percentage of spousal participation among age groups occurred. The mean percentage of household labor contributed by spouses of the younger women (ages 29-34) increased by seven percentage points, while the mean percentage of work contributed by spouses of older women (ages 35-39) dropped eight percentage points during the same period. At two months postpartum, the mean percentage of spousal participation in the division of household labor was almost identical for younger and older age subgroups.

In sum, table 13 shows that there was little change in the percentage of spousal participation in the division of household labor for the total sample from pre- (29%) to

postnatal (30%) periods, although mothers projected prenatally that spousal support would increase (to 38.68%) during the early postnatal period. Considerable change occurred over time, however, within the age subgroups. The percentage of time spouses contributed to household chores increased from 24 to 31% for 29-34 year-olds, and decreased from 38 to 30% for mothers 35 and older. The mean percentage of time spouses participated postnatally (31% for the spouses of younger women; 30% for spouses of older women) was almost identical to the pre- and postnatal mean of the total sample (prenatal mean = 29%; postnatal mean = 30%).

Table 13. A Comparison of Percentage of Time Spouses Participated in the Pre- and Postnatal Division of Household Labor and Prenatal Expectations of Postnatal Spousal Participation

Group	Mean % of time, prenatal spousal participation	Mean % of time expected postnatal participation	Mean % of time postnatal spousal participation
Total group	29 [a]	38.68	30
29-34 years	24 [b]	37.08	31
35-39 years	38 [c]	41.43	30

Note. Total group N = 20, 29-34 n = 13, and 35-39 n = 7 except: [a] n = 16. [b] n = 10. [c] n = 6.

Table 14 shows that during the prenatal period, the late-timing mothers had widely ranging expectations for their husbands' participation in childcare routines. Almost half of the mothers (47.37%) expected at least an egalitarian arrangement where childcare would be shared equally or the spouse would do more. Approximately one quarter of the sample (26.32%) expected help with three or fewer childcare tasks.

Table 14. Percentage of Mothers and Their Prenatal Expectations of Spousal Support in Childcare

Prenatal expectations of spousal support in childcare	% of women	n
Will share all aspects of childcare 50/50 or husband will do more.	47.37	9
Will share childcare.	10.52	2
Will participate in childcare as much as possible or in any way asked.	15.79	3
Will participate in three or fewer childcare routines.	26.32	5

Note. N = 19

Table 15 shows that during the early postnatal period, the mean percentage of spousal participation in childcare routines was 30%, as reported in the Childcare Routines Questionnaire (Welles, 1982). Husbands of younger mothers participated in 40% of the relational routines (i.e. playful interaction), and in 23% of the instrumental tasks (i.e. caretaking tasks). Husbands of older mothers divided their time more equally between instrumental (29%) and relational

(32%) routines. T-tests revealed that the variance between age groups was not significant for all routines (F = .0422, p = .8399), relational routines (F = 4.67, t = .92, df = 17, p = 3.70), or instrumental routines (F = 11.65, t = -1.05, df = 12.76, p = .315). There was much variability in participation in childcare routines, however, amongst spouses of younger women.

Table 15. Percentage of Time Spouses Participated in Childcare Routines

Group	Mean % time spouses part. in all routines	SD	Mean % time spouses part. instrumental routines	SD	Mean % time spouses part. relational routines	SD
Total Group [a]	30	12	25	13	37	18
29-34 yrs. [b]	31	14	23	16	40	20
35-39 yrs. [c]	29	7	29	5	32	9

Note. Instrumental refers to caretaking tasks. Relational refers to playful interaction.

[a] n = 17. [b] n = 11. [c] n = 6.

Note. There was no significant difference between age groups for relational routines (F = 4.67, t = .92, df = 17, p = 3.70), instrumental routines (F = 11.65, t = -1.05, df = 12.76, p = .315), or all routines (F = .0422, p = .8399).

In sum, during the prenatal period 47.37% of the expectant mothers expected their spouses to participate in 50% or more of the childcare routines, while 26.32% expected spouses to participate in three or fewer childcare routines. In fact, spouses participated, on the average, in 30% of the

selected childcare routines in the postnatal period. There was much variability in prenatal expectations of spousal participation and in the actual postnatal participation of fathers in childcare, particularly among spouses of younger mothers.

There was no significant difference between age groups for spousal participation in all selected childcare routines ($F = .0422$, $p = .8399$), relational routines ($F = 4.67$, $t = .92$, $df = 17$, $p = 3.7$), or instrumental routines ($F = 11.65$, $t = -1.05$, $df = 12.76$, $p = .315$).

Research Question #6: Social Support Networks

Do the late-timing mothers receive the type of social support they most often need? From whom?

Table 16 shows expectant mothers' ratings of prenatal social support from a variety of sources including parents, the workplace, and the community. Mothers were asked to respond to the following questions in the prenatal interview: How supportive have your parents been during your pregnancy? How has the workplace responded to your pregnancy? How adequate are the community measures in meeting your needs as a new or prospective parent? Expectant mothers rated these categories of support on a Likert-type scale from 1 to 5. Parents received the highest mean rating (4.40), followed by the community (4.18), and workplace colleagues (4.17).

Table 16 shows that the order of supportiveness differed for younger mothers. Younger mothers rated support from the community highest (mean = 4.50), followed by support from the workplace (mean = 4.45), and support from parents (mean = 4.38). Older mothers rated support from parents highest (mean = 4.43), followed by support from the workplace and community (mean = 3.11).

In sum, table 16 shows that prenatal support from all sources was rated 4.17 or higher by the group as a whole, a rating of very adequate, very supportive, or higher.

Table 16. A Comparison of Mean Maternal Ratings of Prenatal Social Support

	Total group		29-34 years		35-39 years	
Support source	Mean rating of support	SD	Mean rating of support	SD	Mean rating of support	SD
Parents	4.40 [a]	.99	4.38 [b]	1.12	4.43 [c]	.79
Community	4.18 [d]	1.07	4.50 [e]	.71	3.71 [c]	1.38
Workplace	4.17 [f]	1.04	4.45 [g]	.82	3.71 [c]	1.25

Note. Responses were scored on a Likert-type scale of 1 to 5, from least positive to most positive.

[a] $N = 20$. [b] $n = 13$. [c] $n = 7$. [d] $n = 17$. [e] $n = 10$. [f] $n = 18$. [g] $n = 11$.

The results reported in table 16 for the total group of late-timing mothers are recorded by percentiles in table 17. Table 17 shows that 85% of the late-timing mothers found their parents to be very supportive or extremely supportive prenatally. 78% found the workplace very positive or

extremely positive about their pregnancies. 70.5% found that community measures were adequate or better.

Table 17. Maternal Ratings of Prenatal Support

Source of support	Rating of support	% of mothers selecting rating
How supportive	1: Not very supportive	0
have your	2: Somewhat supportive	0
parents been	3: Supportive	5
during your	4: Very supportive	25
pregnancy?	5: Extremely supportive	60
How has the	1: Very negatively	5.5
workplace	2: Somewhat positively	0
responded to	3: Positively	11
your pregnancy?	4: Very positively	39
	5: Extremely positively	39
How adequate	1: Extremely inadequate	0
are community	2: Somewhat inadequate	12
measures in	3: Somewhat adequate	12
meeting your	4: Adequate	42
needs?	5: Very adequate	47

Table 18 shows that the late-timing expectant mothers received helpful support approximately thirteen times a week from their prenatal social support network, as reported in the Prenatal Social Support Network Questionnaire (Crockenberg, 1981). Table 18 shows that the women listed their spouses as their most frequent source of social

support (mean = 5.65 times per week), followed in order by their parents (4.20 times per week), friends (3.15 times per week), others (2.90 times per week), siblings (2.20 times per week), and in-laws (2.0 times per week).

Table 18 also shows that younger mothers received prenatal support more often than older mothers from all network categories except friends. T-tests show that there was no significant difference between age groups for the frequency of prenatal support using a separate variance estimate ($t = 1.68$, $df = 7.68$, $p = .133$). However, a one-way ANOVA analysis of variance revealed that mothers between twenty-nine and thirty-four years of age tended to receive prenatal support more frequently than mothers who were thirty-five or older [$F(1,18) = 4.14$, $p < .057$].

Table 18. Mean Number of Episodes of Social Support Received per Week from the Mothers' Prenatal Social Support Network

Source of Support	Total Group (N=20) Mean # of helpful episodes	SD	29-34 years (n=13) Mean # of helpful episodes	SD	35-39 years (n=7) Mean # of helpful episodes	SD
Spouse	5.65	2.60	6.00	2.12	5.00	3.42
Parents	4.20	1.99	4.77	1.96	3.14	1.68
Friends	3.15	2.13	3.08	2.22	3.29	2.14
Others	2.90	2.86	3.00	3.06	2.71	2.69
Siblings	2.20	2.14	3.08	1.93	.57	1.51
Inlaws	2.00	1.89	2.54	1.98	1.00	1.29
Total	12.85	5.87	14.66	3.87	9.48	7.67

Note. An ANOVA analysis of variance test revealed a trend toward a significant difference between age groups for frequency of prenatal support [$F(1,18) = 4.14$, $p < .057$].

Table 19 indicates who were the late-timing mothers' most frequent sources of social support during pre- and postnatal periods. Any individual rated helpful at least once a day on the Social Support Network Questionnaire (Crockenberg, 1981) is considered a most frequent source of social support.

Table 19 shows that the spouse was listed as the mothers' most frequent source of support pre- and postnatally. 85% of the mothers found their spouse to be their most frequent source of support prenatally, while 95% of the mothers found him to be their most frequent source postnatally.

Table 19 shows that parents were reported to be a most frequent source of support by 10% of the women prenatally and by 40% of the mothers postnatally. Siblings were reported to be a most frequent source of support prenatally by 5% of the women and postnatally by 20% of the women. Inlaw support was more frequent in the postnatal period (15% of the mothers) than in the prenatal period (0% of the mothers).

Table 19 reveals that support from friends and others decreased from pre- to postnatal periods. Friends were rated as a most frequent source of support prenatally by 25% of the women, and postnatally by 5% of the mothers. 30% of the mothers considered others (usually co-workers prenatally) to be a most frequent source of support prenatally, but no mothers found others (a variety of people postnatally) to be a most frequent source of support postnatally.

In sum, table 19 shows that most mothers perceived their spouse to be their most frequent source of social support pre- (85%) and postnatally (95%). Table 14 also shows that support from family members, including the spouse, parents, siblings, and in-laws, increased from pre- to postnatal periods while support from friends and others, non-family members, decreased over the same period.

Table 19. A Comparison of the Frequency of Social Support from the Mothers' Pre- and Postnatal Social Support Networks

	Percentage of mothers indicating source as a most frequent source of social support	
Support source	Prenatal period	Postnatal period
	(N = 20)	(N = 19)
Spouse	85%	95%
Others	30%	0%
Friends	25%	5%
Parents	10%	40%
Siblings	5%	20%
In-laws	0%	15%

Table 20 shows that mothers received helpful support from an average of 5.9 people during the last trimester of pregnancy and from an average of 5.05 people during the first two months of parenthood, as reported in the Social Support Network Questionnaire (Crockenberg, 1981). The mean number of people in the late-timing mothers' social support network declined by 14.17% from pre- to postnatal periods.

Table 20. A Comparison of the Mean Number of People in the Mothers' Pre- and Postnatal Social Support Networks

Period	N	Mean	SD	Range
Prenatal Period	20	5.90	2.2	2-10
Postnatal Period	19	5.05	2.04	1-9

Note. The table shows a decline in mean number of network members of 14.17% from pre- to postnatal periods.

Table 21 shows maternal ratings of the helpfulness of social support received during the first two months of parenthood, based on a scale of 1, not helpful at all, to 5, extremely helpful, on the Postnatal Social Support Network Questionnaire (Crockenberg, 1981). Table 21 reveals that spousal support received the highest mean helpfulness rating, 4.58. 63.16% of nineteen mothers reported spousal support to be "extremely helpful". Parent support received a mean helpfulness rating of 4.05. 33% of eighteen mothers perceived parent support as "extremely helpful".

Table 21 shows that mothers' mean rating of the helpfulness of support from "others" was 4.0. The category of others included a variety of people in the mothers' networks, from co-workers and students to cousins and hospital personnel. 75% of eight mothers who reported receiving support from others rated the support as "very helpful".

Table 21 also shows that in-law support had a mean helpfulness rating of 3.90. 20% of ten mothers reporting in-law support found in-laws to be "extremely helpful".

Table 21 shows that the mean rating for helpfulness of friend support was 3.61. Of thirteen mothers reporting friend support, maternal perception of the helpfulness of that support ranged from 7.69%, mothers who reported friends as "somewhat helpful", to 15.38%, mothers who reported friends as "extremely helpful".

Sibling support was rated lowest with a mean helpfulness rating of 3.60. Half of all mothers in the sample reported receiving helpful support from siblings; 40% of those mothers found sibling support to be "helpful".

In sum, all categories of social support received a mean helpfulness rating of 3.60 (helpful) or higher postnatally. Support from parents, spouses, and others had a mean rating of 4.0 (very helpful) or higher. Spousal support was perceived by the mothers as the most helpful support they received (mean = 4.58).

Table 21. A Comparison of Maternal Ratings of the Helpfulness of Postnatal Social Support Network Members

Source of Support	n	Mean Rating	Percent of mothers reporting rating: 1	2	3	4	5
Spouse	19	4.58	0	0	5.26	31.58	63.16
Parents	18	4.05	0	0	27.78	38.89	33.00
Others	8	4.00	0	0	12.50	75.00	12.50
In-laws	10	3.90	0	0	30.00	50.00	20.00
Friends	13	3.61	0	7.69	38.46	38.46	15.38
Siblings	10	3.60	0	10.00	40.00	30.00	20.00

Note. Rating 1 = not helpful at all. Rating 2 = somewhat helpful. Rating 3 = helpful. Rating 4 = very helpful. Rating 5 = extremely helpful.

Comprehensive social support scores were determined by multiplying together two ratings on the Postnatal Social Support Network Questionnaire: (a) The maternal rating of the frequency of support and (b) the maternal rating of the

helpfulness of support. A high comprehensive social support score indicates that the support received from the people in a specific category was not only very helpful but quite frequent. A lower score indicates that the support was either less frequent, less helpful, or both. The mean comprehensive social support score for a category represents the average comprehensive score of all members in that category.

Table 22 shows the mean comprehensive social support scores of all categories of the mothers' postnatal social support network. A score of thirty is the highest possible mean score for each category. Table 22 shows that spouses had the highest mean comprehensive social support score (23.80), almost three times as high as the mean comprehensive support score for parental support (8.58). Table 22 presents the mean comprehensive social support scores in rank order: Spousal support (23.80), parents (8.58), in-laws (5.40), friends (2.28), others (1.65), and siblings (1.63).

Table 22 demonstrates that the mean spousal comprehensive social support score was higher for older mothers than for younger mothers. An ANOVA analysis of variance indicated that older mothers had a significantly higher spousal mean comprehensive social support score than younger mothers [$F(1,18) = 4.68$, $p < .0443$)]. T-tests revealed, however, that there was no significant difference

between age groups on mean comprehensive social support scores for the entire network (t = - .20, df = 16, p = .847).

Table 22. A Comparison of Mean Comprehensive Social Support Scores of the Mothers' Postnatal Social Support Network

Source of support	Total group mean comp. score	SD	29-34 years mean comp. score	SD	35-39 years mean comp. score	SD
Spouse	23.80	6.96	21.54	7.81	28.00	.00
Parents	[a] 8.58	9.03	10.54	10.27	[b] 4.33	2.99
In-laws	5.40	8.43	5.00	7.64	6.14	10.37
Friends	2.28	2.05	1.60	2.07	2.50	2.07
Others	1.65	2.75	1.54	2.21	1.86	3.76
Siblings	1.63	2.64	1.36	2.03	2.14	3.66
Total	[a] 41.73	14.54	41.60	16.87	[b] 42.00	8.85

Note. Highest potential rating per category is 30.

Note. Mean comprehensive scores are a combined measure of the frequency and the helpfulness of the support received.

N = 20 for the total group, n = 13 for the younger group, and n = 7 for the older group, except [a] = 19 and [b] = 6.

An ANOVA analysis of variance revealed a significant difference between age groups for mean comprehensive spousal support [F(1,18) = 4.68, p < .0443].

A t-test shows that there was no significant difference between age groups for mean comprehensive total network support (t = -.20, df = 16, p = .847).

Table 23 shows that 85% of the late-timing mothers found postnatal social support to be adequate or better for meeting their needs on the Postnatal Social Support Network Questionnaire (Crockenberg, 1981). 5% of the mothers (one

mother) found support not to be adequate. 10% of the mothers (two mothers) found postnatal support less than adequate. 55% (eleven mothers) found the support they received to be adequate, while 30% of the mothers (six mothers) found postnatal support to be more than adequate. The mean for adequacy of postnatal social support was 2.11, which was within the "adequate" range.

Table 23. Percentage of Mothers and Their Perceptions of the Adequacy of Postnatal Social Support

Ratings of support	n	% of mothers
0 Not adequate	1	5%
1 Less than adequate	2	10%
2 Adequate	11	55%
3 More than adequate	6	30%

Table 24 shows that 70% of the total sample reported needing emotional support more than instrumental or informational support during the postnatal period, on the Postnatal Social Support Network Questionnaire (Crockenberg, 1981). Of all three types of support, informational support was needed least by both age groups and the group as a whole. Only 15% of the total sample reported needing informational support the most.

Table 24 shows that 62% of the younger mothers reported that their greatest need was emotional support, and 54% reported needing instrumental support the most. Older mothers were three times more likely to need emotional

support (86%) than instrumental (28.6%) or informational support (28.6%).

Table 24. Percentage of Mothers Reporting Type of Social Support Needed Most during the Postnatal Period

Group	n	Percentage of mothers reporting greatest need was: Emotional support	Instrumental support	Informational support
Total Group	20	70%	45%	15%
29-34 years	13	62%	54%	7.7%
35-39 years	7	86%	28.6%	28.6%

Summary. Pre- and postnatally most of the late-timing mothers found the support which they received to be at least adequate for meeting their needs. Prenatally, 90% found parent support to be adequate or better; 89% found community and workplace support to be adequate or better. Postnatally, 85% of the mothers found the support they received to be adequate or better for meeting their needs.

From pre- to postnatal periods a shift occurred in the rank order of frequency of support from network members. During the prenatal period, mothers received support most often, in order, from their spouse, parents, friends, others, (usually co-workers), siblings, and in-laws. Postnatally the rank order changed; mothers received support more often from family members than non-family members. Their most frequent sources of helpful support in the postnatal period were, in order: Their spouse, parents, siblings, in-laws, friends, and others (a variety of

people). The mean number of people providing helpful support to the late-timing mothers, however, decreased from prenatal (mean = 5.90 people per week) to postnatal periods (mean = 5.05 people per week) by 14.17%.

Postnatally, the most frequent sources of social support were not always perceived as the most helpful. Social support was rated by mothers as most helpful, in order, from: The spouse, parents, others, in-laws, friends, and siblings.

Spouses were perceived as the mothers' most helpful source of support both pre- and postnatally. Prenatally, 85% of the expectant mothers reported their spouse to be extremely helpful, while postnatally that percentage increased to 95%. Postnatally, the spouse received the highest mean helpfulness rating (4.58), followed by parents (4.05), others (4.0), in-laws (3.9), friends, (3.61) and siblings (3.60) in that order.

When the frequency and helpfulness of support were both factored in, the spouse received the highest mean comprehensive social support score of all network categories postnatally, more than twice as high as the mean comprehensive support score of the mothers' own parents. Mean comprehensive social support scores from highest to lowest were received by: The spouse (mean = 23.8), parents (mean = 8.58), in-laws (mean = 5.40), friends (mean = 2.28), others (mean = 1.65), and siblings (mean = 1.63).

70% of the mothers reported that emotional support was the type of support which they needed most postnatally. 45% of the mothers reported needing instrumental support most often, while 15% reported that informational support was their greatest need. Older mothers were more likely than younger mothers to need emotional support (86% vs. 62%) and informational support (28.6% vs. 7.7%). Younger mothers, however, were more likely than older mothers to need instrumental support (54% vs. 28.6%).

Significant differences between age groups were evident on only one social support measure. An analysis of variance indicated that mothers from 35 to 39 years-old had significantly more comprehensive social support (helpfulness and frequency combined) from their spouses in the postnatal period than mothers between 29 and 34 years of age [$F(1,18) = 4.68$, $p < .0443$]. An analysis of variance ANOVA indicated that mothers between 29 and 34 years-old tended to receive support more frequently than older mothers from their total network in the prenatal period [$F(1,18) = 4.1402$, $p < .0569$].

In sum, from pre- to postnatal periods, sources of social support may have changed, but some aspects of social support remained the same. Although the late-timing mothers had anticipated that their husbands would play a greater role in the postnatal household division of labor and childcare than they did, there was little change in maternal satisfaction with social support. 89% of the late-timing

mothers found prenatal support to be adequate or better, and 85% found postnatal support to be adequate or better. The number of people in the mothers' social support network declined by 14.17% from pre- to postnatal periods, but family members became more frequent sources of helpful support than non-family members. The spouse remained the mothers' most frequent source of social support both pre- (85%) and postnatally (95%). He provided the most helpful (mean = 4.58) and most comprehensive social support (mean = 23.80) of all network members postnatally.

Research Question #7: Maternal Age Group Differences

Does maternal adjustment vary between older and younger women within the late-timing sample? If so, in what way(s)?

Maternal adjustment did not vary significantly between older and younger mothers in the sample. There was no significant difference in maternal self-esteem ($F=2.15$, $t=.87$, $df=18$, $p=.396$) or in the quality of the caregiving environment ($t=1.88$, $df=18$, $p=.391$) provided for infants at two months postpartum. There was also no significant difference in the mothers' prenatal attitudes about motherhood, although younger mothers tended to feel more prepared for the baby ($F = 1.77$, $t= 1.75$, $df = 18$, $p = .097$), or in their perceptions of their infant's temperament, although younger mothers tended to view their infants as less adaptable ($t=1.98$, $df=17.64$, $p=.063$).

The only age differences evident in the process of maternal adjustment had to do with social support. Postnatally, older mothers reported a 24% greater need for emotional support and a 21% greater need for informational support than younger mothers, while younger mothers reported a 25.4% greater need for instrumental support than older mothers. Prenatally younger mothers received 14% less help with household chores than older mothers, but the differences disappeared postnatally. Older mothers had 6% more help with instrumental childcare routines, while spouses of younger mothers played 8% more often with the baby. Younger mothers tended to have more frequent support from their entire network in the prenatal period than older mothers [$F(1,18) = 4.14$, $p < .057$], while older mothers received significantly more helpful support from their spouses in the postnatal period than younger mothers [$F(1,18) = 4.68$, $p < .0443$]. Although their needs for support and their networks differed, there was not much difference in their satisfaction with the support they received pre- and postnatally.

Although the process of social support varied betweeen age groups, the maternal adjustment of the older and younger mothers was not significantly different.

Summary of the Descriptive Results

The descriptive data in this study have presented a picture of the late-timing primiparous mothers as women who

have positive prenatal attitudes about motherhood, average or higher maternal self-esteem, and adequate or better social support. The mothers perceived their infants as no more irritable or unadaptable, but significantly less dull and more unpredictable than mothers of the ICQ (Bates et al, 1979) norm group perceived their infants. The late-timing mothers provided a significantly more supportive home environment for their infants than mothers in the norm group of the HOME (Caldwell & Bradley, 1978).

Most late-timing mothers had positive attitudes about motherhood. In the prenatal period, 95% of the mothers looked forward to becoming mothers, 95% felt ready for motherhood, and 85% felt prepared for the baby. Postnatally, the results of similar studies using the MSI suggest that the late-timing mothers fall within the mean range or higher of maternal self-esteem (McGrath, 1989; McGrath, personal communication). The mean maternal self-esteem score on the MSI (Shea & Tronick, 1988) for this sample of late-timing primiparous mothers was 108.50, significantly higher than the Rhode Island sample of pre- and full-term mothers (mean = 102.935), which fell within the moderately high range of maternal self-esteem (McGrath, 1989). The range of scores on the MSI for the late-timing mothers was broad, especially among the older age group, with a standard deviation of 16.32.

The late-timing mothers were significantly more sensitive, responsive, and supportive of their infant's

needs than the norm group of the HOME (Bradley & Caldwell, 1978). T-test results show that the mean total score of the late-timing mothers on the HOME Inventory was significantly higher than that of the norm group ($t = 3.38$, $df = 142$, $p < .05$). The mean factor scores of the late-timing mothers were significantly higher than the norm group on all factors but one, the provision of appropriate play materials.

The late-timing mothers perceived their infants as significantly less dull ($t = 12.64$, $df = 340$, $p < .05$) and significantly more unpredictable ($t = 2.88$, $df = 340$, $p < .05$) than norm group mothers perceived their infants on the Infant Characteristics Questionnaire (Bates et al, 1979). There were no significant differences between the two groups in maternal perception of infant difficultness ($t = .2447$, $df = 340$, $p > .05$) or adaptability ($t = .9880$, $df = 340$, $p > .05$).

The late-timing mothers received adequate or better social support both pre- and postnatally from their social support networks. Prenatally, 85% reported very helpful support from parents; 89% reported adequate or better support from the community; and 78% reported that the workplace was very receptive to their pregnancies. Postnatally, 85% of the mothers responded that they received adequate or higher social support from their postnatal social support network.

The spouse provided the most frequent and most helpful support of all network members pre- and postnatally.

Prenatally, 85% of the mothers reported their spouse to be the most helpful member of their network, while 95% reported him to be their most helpful source of support in the postnatal period. Mothers between the ages of thirty-five and thirty-nine received significantly more helpful support in the postnatal period from their spouses than mothers from twenty-nine to thirty-four years of age [$F(1.18) = 4.68$, $p < .0443$]. The spouse participated in 29% of the division of household labor prenatally and in 30% of the household work and childcare routines postnatally.

From pre- to postnatal periods, a shift occurred in the order of most frequent sources of social support for the late-timing mothers. Reports of most helpful support from friends decreased from 25% to 5%, and from others from 30% to 0% during the first two months of parenthood. Helpful support from all categories of family members became more frequent in the postnatal period than support from friends and others. Coincident with the change in rank order was the decline by 14.17% in the number of social support network members from pre- to postnatal periods.

When both frequency and helpfulness of social support were taken into account postnatally, sources of the most comprehensive social support were, in order: The spouse with a comprehensive support rating of 23, parents (c.s.r. = 8.58), in-laws (c.s.r. = 5.40), friends (c.s.r. = 2.28), others (c.s.r. = 1.65), and siblings (c.s.r. = 1.63). The more frequent sources of social

support (i.e. siblings) were not always the sources of more comprehensive (frequent and helpful) support.

Of all types of social support, emotional support was reported most frequently as the type of support mothers needed most during the first two months of parenthood. 70% of the late-timing mothers needed emotional support most often; 45% needed instrumental support most often; and 15% needed informational support most often. 86% of the mothers from ages thirty-five to thirty-nine and 62% of the mothers from twenty-nine to thirty-four reported emotional support as their greatest need.

Although emotional support was perceived as the most necessary type of support by the group as a whole, the extent of the need for all types of support differed by age group. The younger age group needed instrumental support (54%) more often than the older age group (28.6%), but needed informational support less often (7.7%) than mothers who were thirty-five or older (28.6%).

In sum, the descriptive data of this study reveal that maternal adjustment proceeded with little difficulty for the late-timing primiparous mothers. Prenatally 95% of the mothers looked forward to motherhood, and 85% felt prepared for the baby. Although the mean number of social support networks members declined from pre- to postnatal periods, and the rank order of most frequent sources of support changed, 85% of the mothers reported that they received adequate or better support postnatally. Compared to norm

groups upon which the instruments were standardized, the late-timing mothers have similar maternal self-esteem, provide a significantly more supportive home environment for their infants, and perceive their infants as significantly less dull and more unpredictable, but no more difficult or unadaptable.

The descriptive results have provided a longitudinal view of the process of maternal adjustment of the late-timing mothers, and have led to a greater understanding of the relationship between late-timing motherhood and the variables of maternal self-esteem, the quality of the caregiving environment, maternal perception of infant temperament, and social support. In order to understand the process more thoroughly, however, we will proceed with the results of the hypotheses which will answer questions 8, 9, and 10.

Results of the Hypotheses

Research Question #8

Is there a relationship between the maternal adjustment of the late-timing mothers and infant temperament? Hypotheses 8a and 8b addressed the question.

Hypothesis 8a. There is a significant relationship in a negative direction between maternal self-esteem as assessed by the Maternal Self-report Inventory, and maternal perception of infant temperament, as assessed by the Infant Characteristics Questionnaire, in the early infancy period.

The results were: The Pearson Product Moment correlation coefficient shows a high negative correlation between maternal perception of infant temperament (the ICQ mean total score) and maternal self-esteem (r = - .7412, p < .001) when N = 18. There was also a high negative correlation between ICQ 1 (fussy/difficult) and maternal self-esteem (r = -.774, p < .001) when N = 13.

Table 25 shows that results of regression analysis varied according to which ICQ mean score was used. Some factors of the ICQ were significantly related in a negative direction to maternal self-esteem, while others were not.

Table 25 shows that there was a significant relationship in a negative direction between the mean total score for maternal perception of infant temperament and maternal self-esteem (Mult. R = .7162, sig. T = .0004) at approximately two months postpartum. Forty-nine percent of the variance in maternal self-esteem may be related to maternal perception of infant temperament.

Table 25 shows that maternal perception of infant fussiness or difficultness (Factor I) was significantly related in a negative direction to maternal self-esteem (Mult. R = .6249, sig. T = .0032). Thirty-six percent of the variance in maternal self-esteem may be related to maternal perception of infant fussiness or difficultness.

Table 25 shows that maternal perception of infant unpredictability (Factor IV) was significantly related in a negative direction to maternal self-esteem

(Mult. R = .6154, sig. T = .0039). Thirty-four percent of the variance in maternal self-esteem was related to maternal perception of infant unpredictability.

Table 25. Results of Regression Analysis between Maternal Self-esteem and Maternal Perception of Infant Temperament.

Outcome measure	Predictor variable	Mult. R	Adj. R2	F	T	Sig. T
MSI	ICQ Mean total score	.71622	.48592	18.9589	-4.354	.0004
MSI	ICQ 1	.62486	.35658	11.5297	-3.396	.0032
MSI	ICQ 2	.35276	.07580	2.5583	-1.599	.1271
MSI	ICQ 3	.21989	-.00452	.9145	-.956	.3516
MSI	ICQ 4	.61540	.34420	10.9722	-3.312	.0039

Note. N = 20

Hypothesis 8b. There is a significant relationship in a negative direction between maternal perception of infant temperament as measured by the Infant Characteristics Questionnaire and the quality of the caregiving environment as measured by the Home Observation for Measurement of the Environment in the early infancy period.

The results were: The Pearson Product Moment correlational coefficient showed that maternal perception of infant temperament was not significantly related to the quality of the caregiving environment at the .01 or .001 levels of significance. Table 26 shows, however, that when regression analysis was performed, there was a significant relationship in a negative direction between maternal

perception of infant temperament (ICQ mean total score) and the quality of the caregiving environment during the early infancy period (Mult. R = .4662, Sig. T = .0383). Seventeen percent of the variance in maternal sensitivity and responsivity to infant needs was related to maternal perception of infant temperament.

Although table 26 indicates a trend for maternal perception of infant fussiness (ICQ I) to be related in a negative direction to the quality of the caregiving environment (Mult. R. = .4166, sig. T = .0676), table 26 also shows that no significant relationships were found between any individual ICQ factors and the quality of the caregiving environment in the early infancy period.

Table 26. Results of Regression Analysis between Infant Temperament and the Quality of the Caregiving Environment.

Outcome measure	Predictor variable	Mult. R	Adj. R2	F	T	Sig. T
HOME	ICQ mean total score	.46616	.17382	4.9975	-2.236	.0383
HOME	ICQ 1	.41665	.12768	3.7811	-1.945	.0676
HOME	ICQ 2	.21010	-.00896	.8313	- .912	.3739
HOME	ICQ 3	.23049	.00052	1.0099	-1.005	.3282
HOME	ICQ 4	.32787	.05792	2.1681	-1.472	.1582

Note. N = 20

Research Question #9

Is there a relationship between the maternal adjustment of the late-timing mothers and social support? Hypotheses 9a, 9b, 9c, and 9d answer the question.

Hypothesis 9a. There is a significant relationship in a positive direction between prenatal spousal support as assessed by the Prenatal Division of Household Labor Questionnaire and maternal self-esteem as assessed by the Maternal Self-report Inventory at two months postpartum.

The results show that no significant relationship was found between the two variables, using either correlational analysis (r = .1382) or regression analysis. The instrumental support of the spouse in household work during the later months of pregnancy was not significantly related to the new mother's feelings of maternal self-esteem at two months postpartum. Table 27 shows the results of the regression analysis between the two variables.

Table 27. Results of Regression Analysis between Maternal Self-esteem and Spousal Support in the Prenatal Division of Household Labor

Outcome Measure	Predictor Variable	Mult. R	Adjust. R2	F	Sig. F
MSI	Spousal Participation in Pre. D.L.	.15514	.04564	.34525	.5662

Note. N = 16

Hypothesis 9b. There is a significant relationship in a positive direction between postnatal spousal support as

assessed by the Postnatal Household Division of Labor Questionnaire and the quality of the caregiving environment as assessed by the Home Observation for Measurement of the Environment in the early infancy period.

The results show that no significant relationship was found between the two variables using correlational analysis (r= .5963) or multiple regression. The percentage of instrumental household support provided by the spouse at two months postpartum was not significantly related to the quality of the caregiving environment at approximately eight weeks. Table 28 shows the results of the regression analysis between the two variables.

Table 28. Results of Regression Analysis between the Quality of the Caregiving Environment and Spousal Support in the Postnatal Division of Household Labor

Outcome measure	Predictor variable	Mult. R	Adjust. R2	F	Sig. F/T
HOME	Spousal participation in Post D.L.	.29595	.03690	1.72787	.2052

Note. N = 20

Hypothesis 9c. There is a significant relationship in a positive direction between the helpfulness of the mother's postnatal social support network as assessed by the Postnatal SSNQ and maternal self-esteem as assessed by the Maternal Self-report Inventory at two months postpartum.

Results show that no significant relationship was found between the helpfulness of the mothers' postnatal social

support network and maternal self-esteem at two months postpartum using correlational (r = .1526) or regression analysis. Table 29 shows the results of the regression analysis between the two variables.

Table 29. Results of Regression Analysis between Maternal Self-esteem and the Helpfulness of the Mothers' Postnatal Social Support Network

Outcome measure	Predictor variable	Mult. R	Adj. R2	F	T	Sig. T
MSI	Mean total comprehensive social support score Postnatal S.S.N.Q.	.08636	-.05093	.1277	.357	.7252

Note. N = 19

Hypothesis 9d. There is a significant relationship in a positive direction between the helpfulness of the mothers' postnatal social support network as measured by the Postnatal SSNQ and the quality of the caregiving environment as assessed by the HOME at two months postpartum.

Results showed that no significant relationship was found between the helpfulness of the mothers' postnatal social support network at two months and the quality of the caregiving environment using correlational (r= .2845) or regression analysis. Table 30 shows the results of the regression analysis between the two variables.

Table 30. Results of Regression Analysis between the Quality of the Caregiving Environment and the Helpfulness of the Mothers' Postnatal Social Support Network

Outcome measure	Predictor variable	Mult. R	Adj. R2	F	T	Sig. T
HOME	Mean total comprehensive social support score postnatal	.34606	.0680	2.313	1.521	.1467

Note. N = 19

Research Question #10

Is there a relationship between the maternal self-esteem of the late-timing mothers and the quality of the caregiving environment?

Hypothesis 10. There is a significant relationship in a positive direction between maternal self-esteem as assessed by the Maternal Self-report Inventory and the quality of the caregiving environment as assessed by the HOME in the early infancy period.

The results were: The Pearson Product Moment correlation coefficient showed a strong positive correlation between maternal self-esteem and the quality of the caregiving environment at approximately eight weeks: When $N = 14$, $r = .7207$, $p < .01$. In table 31, results of regression analysis between the two variables also shows a strong positive correlation ($N = 20$, Mult. R = .6721, sig. T = .001). The adjusted R2 reveals that forty-two percent of the variance in the quality of the caregiving environment was related to maternal self-esteem.

Table 31. Results of Regression Analysis of Maternal Self-esteem and the Quality of the Caregiving Environment.

Outcome measure	Predictor variable	Mult. R	Adj. R2	F	T	Sig. T
HOME	MSI	.6721	.42121	14.827	3.851	.0012

Note. N = 20

Summary of Results of Hypotheses Tested

Three of the seven hypotheses about maternal adjustment were supported. Maternal self-esteem was significantly related in a negative direction to maternal perception of infant temperament (r = -.7412, p < .001) (Mult. R = .7162, sig. T = .0004) and in a positive direction to the quality of the caregiving environment (r = .7207, p < .01) (Mult. R = .6721, sig. T = .0012). The quality of the caregiving environment was also significantly related in a negative direction to infant temperament (Mult. R = .4662, sig. T = .0383).

All hypotheses which were not supported by the data were concerned with the relationship between social support and maternal adjustment. Neither spousal support in the pre- or postnatal division of labor nor a combination of support from the mothers' postnatal social support network were significantly related to the maternal adjustment of the late-timing mothers.

In sum, results of the hypotheses revealed that:

8a. Maternal perception of infant temperament was significantly related in a negative direction to maternal self-esteem:

(ICQ mean total: r = -.7412, p < .001;

Mult. R = .7162, sig. T = .0004);

(ICQ 1: Mult. R = .6248, sig. T = .0032);

(ICQ IV: Mult. R = .6154, sig. T = .0039).

8b. Maternal perception of infant temperament was significantly related in a negative direction to the quality of the caregiving environment:

(ICQ mean total: Mult. R = .4662, sig. T = .0383);

(ICQ I: Mult. R = .4166, sig. T = .0676).

9a-d. Social support was not significantly related to either maternal self-esteem or to the quality of the caregiving environment.

10. Maternal self-esteem was significantly related in a positive direction to the quality of the caregiving environment: (r = .7207, p < .01);

(Mult. R = .6721, sig. T = .0012).

Therefore, infant temperament, especially fussiness, was a strong predictor of the maternal adjustment of the late-timing mothers, but social support was not. Infant temperament was a stronger predictor of maternal self-esteem than it was of the quality of the caregiving environment. The more the mother perceived negative

attributes in her infant, especially fussiness, the more difficult was her maternal adjustment. Late-timing mothers who had positive feelings of maternal self-esteem were likely to be sensitive to the needs of their infants and were likely to provide a stimulating and supportive home environment.

Multiple Regression Analysis

A multiple regression analysis was performed with three of the variables associated with maternal adjustment: Maternal self-esteem, maternal perception of infant temperament, and social support. The purpose of the analysis was to validate the results of the hypotheses and to discover the relative contribution of the variables of infant temperament and social support to maternal self-esteem. Maternal self-esteem was selected as the dependent variable and infant fussiness (ICQ I) and the helpfulness of the mother's postnatal social support network (SSNQ) were selected as independent variables. The infant behavior variable was entered on step one, and the social support variable on step two.

Table 32 shows that infant temperament is a strong and better predictor of maternal self-esteem (Sig. T = .0014) than is social support (Sig. T = .6403). Infant fussiness remained in the equation (sig. F = .0009), but the helpfulness of the mother's social support network did not. Infant fussiness accounted for forty-eight percent of the

variance in the maternal self-esteem of the late-timing mothers.

Table 32. Multiple Regression of Infant Fussiness and the Helpfulness of the Mothers' Postnatal Social Support Network with Maternal Self-esteem

Variable	B	SE B	Beta	T	Sig. T
Fussy	-1.74115	.44738	-.70366	-3.892	.0014
Social Support	.07744	.16239	.08622	.477	.6403

Variable	Mult. R	R2	Adjusted R2	F	Sig. F
ICQ I	.7118	.5066	.4758	16.4317	.0009

Note. N = 20

In sum, the results of multiple regression analysis further demonstrate that infant temperament, especially infant fussiness or difficultness, was a strong predictor of the maternal adjustment of the late-timing primiparous mothers, while social support was not.

Post Hoc Analyses

Having analyzed the qualitative data for the personal profiles, it was evident that there was another factor which affected the maternal adjustment of the late-timing mothers. Mothers who were having a difficult time adjusting to their new role had also expressed ambivalent attitudes about new motherhood in the prenatal period. The decision was made to do a post hoc analysis to see if this was true for the group

as a whole, using responses from two questions on the Prenatal Interview which were rated on a Likert scale.

When relationships between prenatal attitudes and maternal adjustment were examined, it was discovered that the degree to which expectant mothers looked forward to motherhood was significantly related to their maternal adjustment. Table 33 shows that this prenatal attitude was significantly related to maternal self-esteem (r = .7568, p < .01), (Mult. R = .8117, sig. F = .0000) and to the quality of the caregiving environment (Mult. R = .6375, sig. F = .0033). Table 33 also shows that looking forward to motherhood was significantly related to maternal perception of infant temperament (r = -.6530, p < .01) (Mult. R = .7091, sig. F = .0007), particularly for ICQ II, unadaptability (r = -.8079, p < .001).

The relationship between maternal adjustment and another prenatal attitude was tested in the post hoc analysis. Table 33 shows that the degree to which the expectant mothers felt prepared for the baby was significantly related to their maternal self-esteem (Mult. R = .4453; sig. F = .0491), but was not significantly related to the total score for infant temperament (Mult. R = .0859; sig. F = .7188) or to the quality of the caregiving environment (Mult. R = .0428; sig. F = .8578).

Table 33. Results of Regression Analysis between Selected Prenatal Attitudes and Infant Temperament, the Quality of the Caregiving Environment, and Maternal Self-esteem

Outcome Measure	Predictor Variable	Mult. R	Adj. R2	F	T	Sig. F
ICQ	Looking forward to motherhood	.7091	.4736	17.1928	-4.146	.0007
HOME	Looking forward to motherhood	.6375	.3715	11.6404	3.412	.0033
MSI	Looking forward to motherhood	.8118	.6389	32.8438	5.731	.0000
MSI	Feeling prepared for baby	.4453	.1537	4.451	2.11	.0491
ICQ	Feeling prepared for baby	.0859	-.0478	.1338	-.366	.7188
HOME	Feeling prepared for baby	.0428	-.0536	.0330	.182	.8578

A multiple regression analysis was performed to explain the percentage of variance in maternal self-esteem which was accounted for by looking forward to motherhood, feelings of being prepared for the baby, and maternal perception of the infant as fussy. Maternal self-esteem was entered as the dependent variable, and the other variables were entered as the independent variables. Looking forward to motherhood was entered on step one, prenatal feelings of being prepared was entered on step two, and infant fussiness was entered on step three. Table 34 shows that looking forward to motherhood accounted for more of the variance in maternal

self-esteem (sig. F = .0013) than prenatal feelings of being prepared for the baby (sig. F = .0818) or maternal perception of the infant as fussy/difficult (sig. F= .0871). Looking forward to motherhood accounted for 64% of the variance in maternal self-esteem.

Table 34. Multiple Regression Analysis of Maternal Self-esteem with Looking Forward to Motherhood, Feeling Prepared for the Baby, and Infant Difficultness

Variable	B	SE B	Beta	T	Sig. T
Looking forward to motherhood	12.0377	3.0563	.5988	3.939	.0013
Feeling prepared for the baby	4.5024	2.4132	.24204	1.866	.0818
ICQ I: Difficultness	-.8426	.4603	-.2710	-1.830	.0871

Note. N = 19

In sum, the findings of post hoc analyses suggest that prenatal feelings of looking forward to motherhood may be a strong predictor of the maternal adjustment of the late-timing mothers. This prenatal attitude was a stronger and better predictor of maternal self-esteem than feelings of being prepared for the baby or infant difficultness.

CHAPTER 5

QUALITATIVE RESULTS: PERSONAL PROFILES

The quantitative results of this study have identified a common pattern of maternal adjustment among the sample of first-time late-timing mothers. Within the sample, however, there were unique styles of adaptation. In this chapter, the maternal adjustment of mothers representing varying styles of adaptation will be presented using the qualitative data collected in interviews, observations, and journals.

Four mothers were selected for the personal profiles: A younger and an older mother who had low mean scores on quantitative measures of maternal adjustment and a younger and older mother who had high mean scores on one or both quantitative measures of maternal adjustment. Two of the mothers had low feelings of maternal self-confidence and much difficulty in understanding and responding to their infant's needs. Another mother appeared to be at-risk for a difficult adjustment in the prenatal period, but adjusted well to new motherhood by eight weeks postpartum through sheer determination. The fourth mother emphatically believed she would be a "fabulous mother". It appeared that nothing would stand in her way, except the need to control which permeated her life.

The degree of difficulty and stress which the mothers encountered varied considerably, from a mother who experienced very much stress and was at-risk for difficulty

with mother-infant interaction, to a mother who appeared to encounter very little stress due to a very adaptable and undemanding infant. The mothers were among the oldest and youngest of the mothers in the study. None of the personal profiles described in this chapter tells the story of a "typical" late-timing mother. There is no typical late-timing mother.

The four profiles of maternal adjustment will be presented by pre- and postnatal periods. The content and sequence of themes varies by individual according to the content and sequence of the open-ended interviews. The format of the prenatal section opens with a description of the mother's background including a brief family history, educational and employment experience, the setting, and a discussion of anything particularly unique about each mother which she has brought to the pregnancy experience. The prenatal section proceeds with a discussion of the mother's attitudes and concerns about motherhood, social support, attitudes about maternal age at first birth, and a summary of the prenatal experience. The postnatal period follows with a brief description of labor, delivery, and hospital stay, followed by a discussion of the mother's first days at home with her infant, social support, postnatal concerns, maternal perception of the infant, maternal self-confidence, the quality of the caregiving environment for the infant, attitudes about motherhood, and a summary of the postnatal

experience. A final summary and conclusions complete each profile of maternal adjustment.

Personal Profile I: Jane, Age 30

Maternal Adjustment: Incomplete

The Prenatal Period

Background

Jane and Jack lived together since they were both eighteen, and they were married for eight years prior to the birth of their first child. Jane worked full time as an operational supervisor before and five weeks after the birth of her first child. Her husband Jack, also age 30, was employed by local municipal authorities on an irregular basis. Jane was taking courses toward a bachelor's degree prior to the baby's arrival, but was disappointed that she could not find the time to continue her education after the birth of her first child.

Jane and Jack lived in a cramped three room mobile home, less than a mile from Jack's parents. There was little privacy. The two bedrooms were located at either end of the living room, which was separated from the kitchenette by a small counter. Voices could easily be heard from one living space to another.

Jane grew up in a rural town in the same region, with four older brothers, her father, and her mother until her death when Jane was eight-years-old. Jane described her

family as poverty-stricken, yet cohesive until the death of her mother. She remembered her mother as a woman of calmness and patience, an ideal Jane was to strive for as she became a mother.

Jane and Jack had casually and unsuccessfully tried to become pregnant shortly after their high school graduation. They decided it was for the best that they did not conceive at the time. They did not seriously try to conceive until they both were twenty-five. Jane did not become pregnant at this time, and Jack did not want to complete infertility tests. They accepted the possibility of being childless, although Jane was deeply disappointed. Over the years, Jack and Jane became content as a couple without children, and it was with apprehension that Jane received the news of her unexpected pregnancy at age thirty.

Prenatal Attitudes

When Jane told Jack that she was pregnant, she was surprised at his joyful response. Jane imagined that Jack was happy being childless, and thought that he would be angry if she became pregnant. This was not so, however. One month prior to the birth, Jane and Jack both appeared eager to become parents. Apparently they had both been disappointed when Jane did not conceive earlier, but never admitted it to one another.

Jane believed that she and her husband were both ready for a child. They had been through a period of "drugs,

alcohol, and immaturity" (Trans. A1, p. 8). When I asked Jane how they felt about having a child, Jane sighed with relief, "The baby is more than welcome" (Trans. A1, p. 8).

Jane felt prepared for the baby. The nursery was set up and organized, prenatal classes had been attended, and many magazine articles were consumed before the time of the first interview. When I asked how prepared she felt for the baby, Jane replied with confidence, "I think I'm as prepared as I'm going to be" (Trans. A1, p. 17).

Social Support

Jane felt well-supported by Jack during the prenatal period. Jack attended childbirth classes, showed interest in the pregnancy process by reading, and encouraged her to follow the doctor's advice about her diet. Jane performed most of the household chores, although Jack helped with dinner and other household responsibilities from time to time. She expected little to change postnatally.

Friends were a frequent source of support for Jane. Although one couple stopped seeing them after learning of the pregnancy, most friends continued to visit and were very emotionally supportive and happy for them.

In Jane's workplace, ten women were pregnant, and an informal intra-departmental support system evolved. The women shared information about childbirth and preparation for the baby. They helped each other out with physically stressful tasks. Although Jane's supervisor was extremely

supportive, Jane was not able to extend her paid maternity (disability) leave beyond six weeks.

During the prenatal period Jane felt neglected by her physician, however, and wished that she had seen a nurse-midwife for her prenatal visits.

Jane's father and brothers provided little support during her pregnancy, but her in-laws filled that gap. Her own family was poor and not a very emotionally supportive family in general. They also were wary that having a child at Jane's age would be detrimental to her or the child. They remained distant, although they communicated by phone. Jane's mother-in-law made maternity dresses for her and new clothes for the baby. Jane began to think of her mother-in-law as her own mother.

Jane was happy to be the center of so much love and attention. She felt loved and supported by her husband, her friends, the workplace, and her in-laws during the entire prenatal period.

Prenatal Concerns

The biggest adjustment for Jane during the prenatal period was having to depend on other people, especially her husband. It was strange for her to feel vulnerable, and it frightened her.

As she looked forward to the future, Jane's concerns turned to finances and parent-child relationships. She hoped that she and her husband would have a close

relationship with their child, something that she never had with either of her parents.

Jane worried that she would not be the mother her own mother or mother-in-law was. They were perfect mothers in Jane's eyes, calm and capable. Jane wondered if she would have the patience and tolerance to sit and comfort her baby. She worried that she would not provide a good role model for a daughter in the adolescent years. Although Jane looked forward to motherhood, she did so apprehensively, with little self-confidence.

Finances were a worry to Jane. She and Jack were not able to buy a house of their own, and their trailer now seemed too small for a growing family. Jane wanted to stay home with the baby for five years, but they needed her income. She planned to return to work five weeks after childbirth. Although she had selected a quality daycare situation for the baby, it was too expensive to afford. Finances were a stumbling block to Jane's dreams of the future.

Jane hoped that her husband would be more involved with their child than her own father had been with his children. She worried that she would spoil her child the way she was spoiled as an only girl. Jane hoped that she and Jack would be able to provide a more balanced and parentally-involved family life for their child than she had experienced with her father.

Jane wanted to establish a close relationship between herself and her child. She wanted to be with her infant at all times, and regretted having to return to work. Jane said, "I can't help but feel I'm going to miss a lot when I'm at work" (Trans. A1, p. 18). A nagging sense of frustration permeated the feelings of joy which Jane had shared during the prenatal period.

Attitudes about Maternal Age

Having a first baby at age thirty felt quite right for Jane. She felt more mature and more settled than she was at age twenty-two, when "drugs, alcohol, and wild times" prevailed. Her marriage was more secure at this time than much earlier. As a late-timing mother, Jane felt she would be conscious of raising her baby as a well-adjusted human being: "I think my baby will be better for my being older" (Trans. A1, p. 22).

Summary

The surprise of pregnancy led to joyful anticipation of raising a child she thought she would never have. Moral support from her husband and friends, her mother-in-law's helpfulness in preparing for the baby, and the helpful information she received from the workplace and hospital about motherhood and childbirth stood in juxtaposition with Jane's prenatal concerns about finances, returning to work prematurely, her relationship with her child, and her lack of self-confidence to be an effective mother. Jane felt

that at age thirty, however, she was better equipped to enter motherhood than she would have been at a much younger age. She did not appear to be overwhelmed by her concerns.

The Postnatal Period

The first eight weeks of motherhood did not proceed as smoothly for Jane as most of the late-timing mothers in this study. The birth itself was fraught with difficulty and the baby later became colicky.

Labor and Delivery

Jane's labor was induced after a problem was detected with the baby through the fetal monitor. At birth, the umbilical cord was wrapped around the baby's neck, and she was whisked away by the Intensive Care Nursery team. After a few minutes, a doctor assured Jane and Jack that their baby was fine. Jennifer weighed 6 lbs. 14 oz. at birth, and was "awfully pretty for a newborn" (Trans. A2, p. 3).

First Days at Home

Shortly after Jane arrived home with her new baby, Jennifer developed jaundice. Mother and daughter returned to the hospital for two more days. When they both came home to stay, Jane found the first days at home very tiring. It was New Year's Eve, and relatives were visiting for the holidays. Jane did not want company; she wanted to be left alone to recover. She wished that family members would offer to take care of her instead of the baby; she wanted to

care for the baby herself. After the holiday period ended and her sister-in-law left, no one was there to help Jane during the day.

Social Support

Jane found the support which she received from her sister-in-law, her husband, the hospital, and the workplace to be helpful, but she resented the help she received from her mother-in-law.

The nursing staff at the hospital was supportive during her hospital stay, and the Pregnancy Resource Center offered a "fourth trimester class" for new mothers which Jane did not attend because of icy road conditions.

During the first days at home, Jack was supportive emotionally and instrumentally. Once Jane returned to work, however, she wished that he would help more often with household chores. He remained attentive to the baby's needs, although he didn't change diapers. Jane commented, "Well, Jack's real helpful with Jenny, but I'd like a little more help with the other things, household duties. I come home after eight hours of work and I have to race around and do the dishes, make dinner, fix her formula, da-da, da-da, da-da..." (Trans. A2, p. 6).

Jane's in-laws provided both helpful and unwanted support. Her sister-in-law took care of her during the first few days at home. She fixed breakfast, did dishes and other helpful tasks. Her mother-in-law, who had been her

greatest support prenatally, became a thorn in her side. "Before, she was absolutely wonderful, damn near perfect...(I know) she means well, but sometimes I feel she has advice for me and won't offer it for fear I'll think she is meddling so she kind of offers it in really subtle ways" (Trans. A2, p. 12). "Sometimes I think she's obsessed with my baby" (Journal, p. 9). "She snatched her and won't give her back" (Trans. A2, p. 12). "Other times I think I'm just afraid that Jenny will love her more than me" (Journal, p. 9). Jane considered her mother-in-law's support to be an intrusion on her maternal role; she felt she had to compete for her own daughter's love.

The new mothers in her workplace developed an informal support network within their department. Jane's boss offered reduced hours which she could not afford to accept. Jane wished that she was able to stay home longer than six weeks, with pay.

In sum, social support was available in the postnatal period, but it was not always the type of support which Jane wanted or needed.

Postnatal Concerns

Postnatally, Jane had special concerns about adapting to new routines, developing a close relationship with her daughter, childcare, and balancing the needs of her marriage, her household, her infant, and herself.

Jane returned to work when her baby was five-weeks-old. She had doubts about how the baby-sitter handled her infant's crying bouts, but was too tired to communicate with her after a ten hour day of work and commuting. Everything seemed tiring to Jane except her job.

At eight weeks, Jane was concerned about the relationship she and her new infant were beginning to develop. She was worried that her baby would form an attachment to the baby-sitter or to her mother-in-law instead of to herself. She commented, "I feel like I'm not getting time with my baby. The baby-sitter gets her ten hours a day, I race through feeding in the morning, rush her out the door, the sitter gets her, Jim feeds her while I fix dinner. I might give her an 8 o'clock feeding..." (Trans. A2, p. 6). Jane continued in a querulous tone, "She's awfully content sometimes with other folks" (Trans. A2, p. 7).

Jane felt confused. Getting used to a new routine was one of the most difficult aspects of maternal adjustment for Jane. Routine had always been very important to her, and when she returned to work she missed having an uninterrupted morning routine while getting ready for work.

Balancing the needs of her infant, her marriage, and her own needs was of great concern to Jane: "Where do I put my energy and my time?" (Trans. A2, p. 14). At two months postpartum, Jane prioritized her needs in this order: (a) The baby, (b) her job, (c) her husband, (d) her house, and (e) herself. "And the last two hardly ever get taken care of" (Trans. A2, p. 14).

The Infant

The most difficult thing for Jane to learn about Jennifer was how to respond to her crying. When the baby was four-weeks-old, Jane switched from breast milk to formula, and Jennifer became constantly irritable. Their doctor told them that Jenny had colic, which was due, he said, to the difficulty she had in changing states. "It's hard to stay calm. She's fed, has clean diapers, and doesn't particularly care to be cuddled. What else is there?", wondered Jane (Journal, p. 6).

At eight weeks, Jane described Jenny as "so pretty and when she is not screaming with colic, she's really a very happy baby" (Trans. A2, p. 7). She sleeps well, but when she cries, she cries unconsoledly.

Maternal Self-confidence

Jane was ambivalent about her maternal abilities. At two weeks postpartum, she commented in her journal (p. 3): "I think I'm beginning to gain some self-confidence in regards to baby care." At four weeks, however, Jane found

it difficult to cope with Jennifer's crying bouts: "I feel like a dope" (Journal, p. 1). This is "...new ground for such a know-it-all as me!" (Journal, p. 2). At eight weeks, Jane was discouraged. "There are times when I feel pretty confident and times when I feel like what did I get myself into, I can't deal with this" (Trans. A2, p. 11). Jane wasn't sure she would have the patience to be a mother for the next eighteen years. Her infant's fussy temperament seemed to erode her feelings of maternal self-confidence.

Jane felt most self-confident about her maternal abilities when she was the only one who could console her crying infant. She enjoyed her maternal role when she could successfully read Jennifer's communication cues. Jane's self-confidence as a mother was very dependent upon Jennifer's responsiveness to her. Jane summarized her feelings of maternal self-esteem at eight weeks postpartum with these words: "Although I'm feeling more confident every day, I still have moments of feeling inadequate" (Journal, p. 8).

<u>The Quality of the Caregiving Environment</u>

As I observed Jane holding her baby during our interview, I wondered why she did not respond more often to Jennifer's squirming and fussing. There was little cuddling and few interchanges between mother and infant. Jane did respond to Jennifer's more distinct vocalizations, but she

never spontaneously initiated interaction with her during our visit.

When visitors arrived, Jennifer was scooped up by them. Her father also held her for a while as he watched a ball game on television. When Jennifer became too fussy, however, she was returned to her mother in the kitchenette.

Jennifer's crib was in a room at the other end of the mobile home from her parents' bedroom. The room was filled with adult paraphernalia and gifts of infant toys and equipment which had not yet been used. Jane hadn't attached the infant mirror to the side of the crib, and a new crib gym had not been touched. Jane intimated that she intended to use the new toys with Jennifer, but she hadn't found the time to set them up. It appeared that Jane didn't foresee that the toys could be stimulating to her infant or a distraction to her at stressful times.

I asked Jane if the baby-sitter had toys or equipment for Jennifer. She replied that she hadn't supplied the baby-sitter with any toys or equipment. Jennifer cried so much at the sitter's that the sitter was often frustrated, and held or carried her about for most of the day. I sensed that neither Jane nor her sitter had the time, energy, or perhaps the sensitivity to respond appropriately to Jennifer's needs.

Jennifer received little stimulation during her day. At the sitter's she cried most of the time, and rarely went out. When at home, Jane was so involved with household

chores that she had little time to comfort or play with her. Jennifer's father held her when Jane was preparing dinner, but he focused his attention on the television more than Jennifer. Jennifer had age-appropriate toys and equipment but had not been introduced to them.

In sum, the home environment for Jennifer lacked parent involvement and opportunities for daily stimulation. Little was provided in the area of appropriate play equipment, although some was available. Jane was responsive to Jennifer's cues, however, and was trying to learn how to comfort her.

At the end of our interview, Jane felt relieved when she put Jennifer down for a nap, and as she predicted, Jennifer fussed and cried a little before falling asleep. Jane was able to maintain self-control, and never shouted or showed anger or frustration toward Jennifer during our entire visit.

Attitudes about Motherhood

Being a mother was not at all what Jane imagined it would be. "I didn't expect it to be so tiring...so emotionally tiring. In the same respect I feel like I'm a little more full" (Trans. A2, p. 11). "It's got to be the hardest job ever" (Journal, p. 5).

Summary

The adjustment to motherhood was not easy for Jane, and was certainly not complete at two months postpartum. Jane

lacked the emotional and instrumental support which she needed, felt inadequate as a mother, perceived her infant as very irritable, and was concerned that returning to work early had disrupted the developing attachment relationship between herself and her child.

Jane felt that the support which she received was inadequate and at times inappropriate for meeting her needs. Working an eight-hour-day, tending to the baby's needs before and after work, doing most of the housework, and receiving little helpful support from others was tiring and frustrating for Jane.

Jane wanted to remain out of the work force longer, but financial needs outweighed her own desires. Prenatal concerns about developing a close relationship with her child pressed heavily on her as Jane worried that Jennifer would not learn to recognize that she was her mother.

Jane lacked confidence in her own maternal ability. Her maternal-self-esteem was contingent upon her ability to console Jennifer, and the responsiveness which the baby demonstrated to her efforts. Jennifer, however, was a colicky baby, and was not easy for anyone to console.

Summary and Conclusions

Jane's prenatal concerns about motherhood did not fade away in the postpartum period. Prenatally, she had looked forward to motherhood with apprehension, worried that she might not possess the maternal qualities she perceived in

her own mother and mother-in-law: Patience and calm. Postnatally, Jane felt less than adequate as a mother. She felt incapable of understanding and meeting her baby's needs. She perceived her infant as extremely irritable, and herself as a mother on the edge of losing self-control some of the time.

Prenatal concerns about establishing a close relationship with her baby continued into the early postnatal period. Jane regretted having to leave her baby with another caregiver, and resented her mother-in-law's intrusion and subtle hints about infant-care.

The support and attention which Jane received prenatally shifted to the baby postnatally. There was no honeymoon period for Jane; after the first week, she had little help with household chores. When she returned to work at five weeks, Jane wished Jack would be more helpful around the house so that she could spend more time with her baby.

Returning to work at five weeks postpartum contributed to Jane's lack of maternal self-confidence. The mother and infant had decreasing time to become familiar with each other's cues and communications. Jane became jealous of the time others were able to spend with Jennifer.

Jane's adjustment to new motherhood was evident in her feelings of maternal inadequacy and in the difficulty she had reading her infant's cues. Prenatal feelings of apprehension about being an effective mother and a lack of

adequate and appropriate social support may have set the stage for a difficult adjustment to motherhood. It is not possible to determine if Jane's perception of Jennifer as irritable was a cause or effect of her difficult adjustment to new motherhood, but it was clear from observation and interview that the home environment was not appropriately meeting Jennifer's or Jane's needs at two months postpartum.

Although Jane was experiencing a great deal of difficulty adjusting to new motherhood, in her own eyes, she was a more patient mother at age thirty than she would have been at a much younger age. Perhaps this thought kept her going when times were difficult.

Profile II: Suzy, Age 37

Maternal Adjustment At-risk for Interactional Difficulties with the Infant

The Prenatal Period

Background

Suzy is of Chinese descent, and had been a resident of the United States since she attended a prestigious college in northern New England. She attended graduate school in the western part of the United States for an extended period of time. More recently, Suzy had been a computer programmer.

Suzy's husband, Jay, was thirty-six-years-old and of Caucasian heritage. This was the first child for both parents.

Suzy and Jay had lived together for seven and a half years prior to Suzy becoming pregnant. At the time of the study, they were living in a three room apartment in a residential neighborhood, close to the college where Jay was affiliated.

Suzy was born and raised in Hong Kong in what she described as a lower-income family, with three other siblings. Both of her parents worked; her mother worked at home where the children also assisted when they were capable. Suzy's father believed that a college education was vital for both boys or girls, so Suzy continued her education in the United States. Her father had passed away, and Suzy had seen her mother only once in the last few years.

When I first met Suzy, it was a dismal November day. We met in the sparsely furnished campus center of a northern New England college, which she had attended as an undergraduate. Suzy was dressed in dark colored sweatclothes, and kept her feet elevated (on the coffeetable in front of us), as directed by her midwife. Her cervix was thin and a premature delivery likely if she did not stay off her feet. As it was, Suzy delivered two weeks late, by C-section.

What struck me immediately about Suzy was her willingness to talk openly with me about her experiences and feelings surrounding motherhood. I wondered if she had no one else with whom to share her thoughts. When I asked Suzy how often she talked with her friends about her pregnancy, she responded by saying that she avoided the subject when with her friends because she felt they wouldn't be interested.

Prenatal Attitudes

Suzy's pregnancy was planned and desired by both parents. Suzy reasoned that she should have a baby now, as it was the last chance before infertility became a problem. Suzy was concerned that she might be sorry in the future if she never had a child.

Suzy still felt it was too soon to be a mother; she wished she had more time to travel. Trying new things, being independent, and not having to be there for someone else were important to Suzy at this time. When I asked her what age she thought was a good age to have a first baby she replied, "I was thinking like 40 would be a good age -- if it is biologically possible" (Transcription B1, p. 3).

Although they had planned the pregnancy, themes of not being ready or prepared for having a child continued to emerge in our prenatal interview. Suzy described herself and her husband as "less ready than you're supposed to be" (Trans. B1, p. 6) and "totally unprepared for anything"

(Trans. B1, p. 6). She appended that statement by replying that they were somewhat prepared because they had a place where the baby could be warm, and they were financially sound so the baby would be well-fed. When I asked Suzy how ready they felt as a couple about becoming parents, she replied, "Not at all...because we are not really into raising children" (Trans. B1, p. 6). She felt, however, that the baby would fit in with their lifestyle because they were flexible and had enough resources to raise the baby. Becoming a parent did not appear to be a highly desirable lifestyle for Suzy, but she became pregnant out of concern for her future.

Suzy planned to stay home from work for six months to a year to take care of her infant. One of the reasons she wished to do this was to teach the baby her dialect and language. She also saw this as an appropriate time to leave a job which no longer suited her. It did not appear that Suzy desired to stay home with her baby to facilitate the development of a close bond or emotional attachment.

Prenatal Concerns

Reservedly, Suzy expressed concern about balancing her time between taking care of the baby, doing things for herself, and maintaining the relationship she had with her husband. She expected her life to change a lot, but not completely.

Social Support

Suzy received offers of support from several friends in the months prior to giving birth to her first child, but she received no tangible support. She considered her husband to be her greatest support during the prenatal period. He provided emotional support every day, and lent a hand with household chores two to three times a week. Household work, however, was not a priority for Suzy and Jay. They rarely did housework.

From the beginning, before they were married, it was clear to Suzy that she would be doing most of the household work. She described her husband as more "conventional... not one of these new age kind of males" (Trans. B1, p. 9). When I asked her how she expected her husband to participate in childcare, Suzy replied that she would do most of it as she would be the one who was breast-feeding. Jay would feed the baby with a bottle if it was a necessity. Suzy did not express any concern about the postnatal division of household labor or childcare routines. She accepted the idea of being fully responsible for household chores and childcare routines.

Suzy's mother made and sent some clothes for the baby from Hong Kong, and offered advice through phone calls and audio tapes which Suzy said were "fun to listen to but seemed far-fetched to be applied to what I am" (Trans. B1, p. 4). Suzy considered her mother's offer of coming to see her as her most precious gift.

Friends shared parenting experiences, and offered to help Suzy with grocery shopping and similar chores after she became semi-confined. Co-workers offered advice. Everyone offered congratulations to them, but Suzy suggested with apprehension, "You don't know what they do after they've left me. They may try to humor us and say that you guys will make good parents" (Trans. B1, p. 8). No friend, however, provided emotional support equal or close to the amount which her husband provided.

Suzy found that the community in which she lived was most supportive of new parents and families. The local teaching hospital offered many classes for expectant and new parents. Suzy's landlady was particularly helpful when she agreed to let them stay in a building where no children were previously allowed. Suzy investigated daycare services in case she changed her mind about returning to work, and found, however, that they were inadequate for infants. The waiting period was about one year for most centers. The support which Suzy needed prenatally was available in her community, but postnatal childcare was a concern.

Summary

Support did not seem to be a critical issue for Suzy prenatally; her readiness for parenting was. She questioned her own readiness to be a mother. Her image of a mother was "somebody who is much more stable and much more serious than I am. Now, I'm more like a flake" (Trans. B1, p. 12). Suzy

viewed her own accomplishments as never quite ready, completed, or good enough.

Becoming a mother at a later age was not an issue for Suzy or an unusual occurrence in the highly-educated academic environment where she lived. She would have delayed parenting longer if she thought it was physically possible. Settling down to accept responsibility for someone other than herself was Suzy's primary concern at our prenatal meeting. As she approached the ninth and final month of her pregnancy, Suzy's thoughts centered on the postnatal dilemma of finding time to pursue her own interests (her interests changed from time to time) while being the infant's primary caregiver 100% of the time. This was an unsettling situation for Suzy.

The Postnatal Period

I met Suzy and baby Anna at their apartment for our postnatal interview. Anna was two months old, but appeared to be as large as a four-month-old. Suzy had just recovered from a severe influenza virus, which her husband had the previous week. Things had not been going well for Suzy since the baby was born.

Labor, Delivery, and Hospital Stay

Anna was two weeks late at birth and had to be delivered by C-section. It was a long and arduous labor, attended by Suzy's mother-in-law from Connecticut. Her

husband arrived just before the operation began only to leave the room because he "couldn't deal with the operation" (Transcription B2, p. 3).

Suzy asked to stay longer than the required hospital stay for C-section mothers because she "had no idea of how to be with this little baby" (Transcription, B2, p. 4). She described her state as "a very bad case of depression" (Transcription B2, p. 4).

The nurses were very helpful to her. They were informative about newborn care, kind, and took care of the baby at night while Suzy got some sleep.

Social Support

When she arrived at home, her mother-in-law was there to help out during the day for twelve days. Feelings of remorse, however, overcame Suzy at night during the first week at home. She had no idea how to calm Anna's crying bouts in the night, when she herself was trying to sleep. No one told her, "that's what babies are like and this won't last forever" (Transcription B2, p. 5). Suzy's husband relieved her in the early morning and early evening so that she could get some rest. Suzy described her mother-in-law as her greatest support during the first two weeks of motherhood.

Suzy's husband, Jay, and a few friends provided some support after her mother-in-law returned home. Jay took over with the baby if she cried when Suzy needed to prepare

food. When he didn't want to accompany her grocery shopping, Jay stayed home with Anna. Suzy's friends didn't disappear as she thought they would. They delivered food to her door, and immediately left so that Suzy could get her rest. Occasionally they babysat, and provided transportation.

Informational and emotional support were available through a postnatal class called The Fourth Trimester, at the hospital where Suzy gave birth. Suzy attended this class once or twice, but found it difficult to get there in the winter with no transportation. It was a long way to carry her baby.

The support which Suzy received from her husband, mother-in-law, and friends seemed very helpful to her. For the most part, her early support was instrumental; friends delivered food to her door, and her mother-in-law helped with the housework. After the first few weeks postpartum, emotional support became an overriding need for Suzy. Informational support was lacking which would have helped her understand how to respond to Anna's fussy periods. Suzy had only her husband to count on for emotional support, and only a few books to read about infancy. When Suzy became sick with the flu, no one was there during the day to care for her or Anna. This interview took place shortly after Suzy's recovery.

The Infant

Suzy's first impression of Anna was surprise. Anna was not the beautiful little baby she expected, but a "giant baby", (Transcription B2, p. 3), 10 lbs. 2 oz. At two months old, Suzy described Anna as a "good" baby who seldom cried. She also saw her as a "hyper" baby, one who cannot "sit up and look around for a long time without getting antsy" (Trans. B2, p. 12). Suzy wished out loud that Anna would be able to entertain herself a little bit more than she did.

The Quality of the Caregiving Environment

Suzy often felt frustrated that she did not know how to calm Anna. Usually she breast-fed to quiet her. During meal preparation Suzy often put crying Anna into a portable swing or sometimes just let her cry.

Anna became too heavy to be carried in a Snugly; Suzy's back became sore when she tried. It was easier for Suzy to stay at home, in the three room apartment, where Anna slept in a bassinet in the living room, next to a crib which overflowed with clothes and coats.

It appeared that Suzy did not intuitively know how to communicate with her baby. She told me, "I don't think I know how to really play with babies" (Trans. B2, p. 10). Nor was she cognizant of the capabilities of newborns. "You can't do very much with babies. They don't really act. Basically you walk around with them and make sure they don't

cry" (Trans. B2, p. 6), Suzy informed me. Referring to Anna, Suzy continued, "She doesn't really play with any toys either" (Trans. B2, p. 10). Anna's only source of stimulation in her bassinet was a mobile hung precariously from the edge of the crib next to her. No other toys or wallhangings were accessible or visible to Anna.

After seeing a T.V. special on SIDS during Anna's early infancy, Suzy often worried about finding her baby dead in her crib. When her husband asked her what she would do if this happened, she replied, "If she is dead I can't really do anything can I?" (Trans. B2, p. 14). This statement suggests that Suzy lacked emotional involvement with Anna at two months postpartum.

Maternal Self-confidence

Suzy was ambivalent about her ability to understand and meet Anna's needs. At one point in our interview Suzy replied that she felt she understood how to take care of her, and a few minutes later she said that she was not quite sure how to handle Anna. Often she put Anna into the portable swing, which made Suzy feel like she was abandoning her. Suzy imagined she should be "watching her and talking to her and making her smile and stuff" (Trans. B2, p. 10), but even holding Anna was tedious. "I felt like I'm just not really actively being a loving mother" (Trans. B2, p. 10). "I don't feel like I'm totally involved...I don't feel like a mother" (Trans. B2, p. 12), Suzy replied. The

easiest part of motherhood for Suzy was the mechanics of taking care of the baby; the difficult part was expressing love to her baby, and understanding how much love and attention Anna needed.

Attitudes about Motherhood

When I asked Suzy if she enjoyed being a mother she replied that she saw motherhood as a tremendous responsibility, too much responsibility. For Suzy, motherhood and responsibility were equivalent.

From the beginning, Suzy viewed motherhood with curiosity. Her decision to have a baby was not based on the desire to be a mother, but on the fear of missing out on something she could not do later. She wondered, what would it be like to have a "little kid"?

There was little joy in motherhood for Suzy, however; everything seemed like a chore to her. "Anything that's sort of beyond taking care of her, it seems insurmountable..." (Trans. B2, p. 7), Suzy lamented.

Postnatal Concerns

Suzy expressed concern that she was not balancing her own needs with those of her infant. She considered for a moment having a second child, but worried that she would lose five years toward pursuing her own interests. Suzy began to view her age as a stumbling block for the first time.

Summary

After the first two weeks postpartum, Suzy found herself totally responsible for the care of her newborn. She had little information or intuitive understanding of how to respond to her newborn's cues. The home environment provided little stimulation for Anna.

At two months postpartum, Suzy was having doubts about her competence as a mother. A c-section birth, postpartum depression, and a baby who did not fit Suzy's image of a newborn may have contributed to her feelings of ineffectualness.

Suzy seemed to dwell on her maternal self-image. She was not experiencing the feelings which she thought mothers should feel toward their young infants. She did not feel loving. Feelings of attachment to her infant may have been delayed due to her own and her husband's illness, her inability to hold her baby without pain, her perception of the baby as difficult, and a lack of social support of all types. For a woman used to being spontaneous, adjustment to first-time motherhood was not facilitated by being isolated for most of the day in a small three room apartment with no one to relieve her.

Summary and Conclusions

During the last trimester of her pregnancy, Suzy lacked a strong desire to become a parent, and felt that she and her husband were not ready to become parents. Suzy was not

prepared emotionally or informationally to understand what to expect in the early months of motherhood and infancy. She had no one, not even her mother, to talk with who she felt would be interested in her pregnancy.

Suzy felt she would never fit the image she held of a mother who was prepared, stable, and serious. She had little confidence that she would be that kind of mother. Instead, she approached parenthood with curiosity, and considered it to be an insurance policy for possible feelings of remorse which might occur later if she were to remain childless. The Chinese custom of depending on adult children for care in old age may have been an underlying reason for becoming pregnant.

Suzy's adjustment to motherhood was not easy. She felt tired and burdened. She wasn't sure what to make of her infant daughter or how to handle her crying bouts. Suzy said that she had adequate support, but it could be that she believed that mothers should be able to adjust to new motherhood with little outside support.

Suzy would have waited until age forty to have her first child, but she wasn't sure pregnancy would be possible then. She did not have a great desire to parent at age thirty-seven. Suzy felt, however, that it was far better for her to become a mother at her present age than it would have been for her to become a mother in early adulthood, when she was so uncertain of own personal goals. Perhaps if Suzy had followed her own advise of waiting until she had a

strong desire to be a mother, her maternal adjustment might have been easier.

In sum, the adjustment to motherhood for Suzy was mediated by a combination of negative prenatal attitudes about motherhood and self as a mother, a difficult pregnancy, birth, postpartum depression, illness during the early postnatal period, a lack of adequate support in the prenatal period and postnatal periods, an infant perceived as difficult and demanding, a lack of responsiveness and sensitivity to her infant's communication cues, and feelings of inadequacy as a mother.

Personal Profile III: Bridgette, Age 29

A Less Difficult, although Potentially Problematic Maternal Adjustment

The Prenatal Period

Background

Bridgette grew up in a family of six brothers and sisters, a mother, and a father. They are a "really close family...communicate well, and...get along fabulous(ly) now" (Trans. C1, p. 1). Relations with her parents were "great. Really good. It's always been very good" (Trans. C1, p. 1).

Bridgette was an honors high school student, and graduated early from high school. In rebellion toward family values, "to break the mold and get away" (Trans. C1,

p. 1), she moved to Maine for eight years, where she worked at odd jobs, but most often as a cook.

Finances drew Bridgette back to her hometown where she joined her family in their family-owned business, as a caterer. She worked alongside a brother and sister, putting in fifty to eighty hours of work time each week.

In her hometown, Bridgette met John. They were married for a year, but lived together for two years before the birth of their first child. It was her first marriage, but his second. At the time of the interview John was forty-seven and had two older children from a previous marriage who did not reside with him.

Bridgette considered her relationship with John to be "great" (Trans. C1, p. 3) and their communication "excellent" (Trans. C1, p. 3). They lived in their own home which John was renovating with the help of his brother.

I met Bridgette for our prenatal interview in her childhood home, which was being rented out. She walked right in and made herself at home. She made us a cup of tea.

Prenatal Attitudes

There was never a question in my mind that Bridgette was looking forward to motherhood with great anticipation and little apprehension. When I asked her how ready she was to become a mother, she replied, "Very ready. I have been ready for ten years to have a baby, but I've just (recently)

wound up being settled enough and having the right mate" (Trans. C1, p. 3). As a couple, they felt "more than ready" (Trans. C1, p. 3) to become parents.

Bridgette's image of motherhood was traditional. Becoming a mother meant two things to her: (a) Not having to go back to work and (b) being "a very loving, giving kind of person" (Trans. C1, p. 8) like her own mother.

Bridgette did a lot of mental and emotional preparation for motherhood (Trans. C1, p. 9), and informational preparation which included a lot of reading and listening to tapes about childbirth, health care, and nutrition. Physical preparation seemed unnecessary at this point in her pregnancy with two full months left until the baby was to arrive. She replied, "I don't think the material things for the baby (are important)...I mean my mother had six, (all) under six. We all had a drawer in a dresser (to sleep in)...I think it is all kind of a bunch of nonsense because the baby is just a little baby for the first month...it doesn't really matter where you lie him down for the first few months anyway, so I think preparedness-wise, I'm very prepared" (Trans. C1, p. 9). When I asked Bridgette how she expected her life to change after the baby comes, she replied, "It has to do with being prepared for so long that I kind have already set my lifestyle in such a way that it won't make a big disruption" (Trans. C1, p. 10).

Prenatal Concerns

Bridgette had few concerns or worries during the prenatal period. Her greatest concern was related to her body. She said, "I don't like being 25 pounds heavier (Trans. C1, p. 6). "I just want my body back. My breasts have gotten like six sizes larger" (Trans. C1, p. 11). "I feel really invaded. It is a good feeling of invasion but...it is cumbersome being thirty pounds heavier...I want to feel thin and sexy again" (Trans. C1, p. 12).

Bridgette also thought a lot about childcare options for her child. She felt strongly that children should begin interacting with other young children at an early age, as early as six months. Finding the right daycare or playgroup leader is imperative, she believed. She wanted her child to have a teacher "who is very responsible, has a good reputation and good credentials (Trans. C1, p. 10). "It is real important to find the right person for that" (Trans. C1, p. 10). Bridgette did not want to send her child to a daycare home where, she believed, the child would be ignored for most of the day.

Social Support

Bridgette had no concerns about social support. She said, "I'm all set in those areas. As a matter of fact I usually make a few calls to make sure my friends, family, and co-workers are all right or if they need any help. This is probably the most positive and least stressful period in

my life, and all is well. I just hope I'm not a minority" (Journal, p. 3).

Bridgette's family and friends were very emotionally supportive. Her parents were "dying for grandchildren" (Trans. C1, p. 2). Her friends were very excited for her; most of them were not married or mothers yet. They each thought of this child as one part their own (Trans. C1, p. 4).

Bridgette received mostly emotional support from friends and family, but there is a distinct possibility that she would have appreciated more attention from her family. She replied, "It's been really hard for me because my body hasn't popped out...If I was showing a lot more earlier then everybody would feel that I am pregnant...My sister is two months ahead of me so we've been giving a lot of attention to her, and I don't feel the need for all that attention yet (Trans. C1, p. 4).

Co-workers were "so helpful it gets ridiculous at times...'Don't lift this'..." (Trans. C1, p. 5). Instead of allowing her co-workers to dote on her pregnancy, however, Bridgette trained them to take over in her absence.

Bridgette didn't talk very much about her husband and how supportive of her he was during her pregnancy. When I asked about what John had been doing to help her, she replied that she and her husband had a traditional division of labor; she did the inside chores, and he did the outside

chores, except gardening, which was absolutely fine with her. She appeared to be content with the arrangement.

Support from the regional hospital resource center was exceptional, Bridgette reported. They offered classes, books, and a place to go any time of day or night. She knew of no community support measures, however, in her own town, for pregnant or new mothers.

Attitudes about Maternal Age

It was the consensus of opinion among Bridgette and her friends that having a baby after the age of twenty-five is more common than becoming a parent between the ages of eighteen and twenty-three. "Most people are going to college and considering their careers" (Trans. C1, p. 12).

Bridgette waited until her late twenties to consider parenting because she believed that early relationships don't last; she did not want to become a single parent. To Bridgette, later parenting meant having a husband and father in the home for at least twenty years. "I think it would be a lot scarier at twenty-two -- mentally, emotionally, and financially, those three reasons for starters" (Trans. C1, p. 13), replied Bridgette.

Summary

Bridgette had a quality in her demeanor of being a thorougly capable and independent person, totally self-confident and self-sufficient, rebellious at a younger age, yet conforming to traditional family values at a later age.

She believed she could do anything well, including motherhood. She was more than ready to become a mother and was prepared as much as she felt was necessary. She believed she had all the support that she needed, and felt secure emotionally and financially.

Bridgette's greatest concern during the prenatal period was the shape and size of her body; quality childcare was a secondary concern. She was glad to have waited until age twenty-nine to become a parent, and considered it normative to become a mother between twenty-five and thirty years of age.

The Postnatal Period

I met Bridgette in her home for the postnatal interview. A lot of activity had been going on there. A garage was in the process of being built; a bathroom was being enlarged; seedlings in pots blanketed the dining table, most of the dining area floor, and windowsills. The baby slept soundly in the loft above while her mother and I sat out on the patio for the interview. The noise of the traffic and windchimes made it difficult to hear any sound from inside. Bridgette smoked cigarettes and appeared slightly stressed and uncomfortable throughout the interview.

Bridgette let me know through unspoken language that she was going to be in control of our interview. I sensed a resentment of the researcher's presence, as if I was taking

up the time she could be using for her own interests. Bridgette smoked frequently both inside and outside of the house. She spoke with an air of self-assurance.

Labor, Delivery, and Hospital Stay

Our interview began with a discussion of the labor and delivery process. Labor was short, only three and a half hours. Bridgette's mother assisted, while her husband stayed downstairs in the hospital lounge. Bridgette told me, "He was not interested in being there at all. No. Too messy" (Trans. C2, p. 1). "Labor was "a breeze" (Trans. C2, p. 1), although Bridgette had never taken any birthing classes. She said, "I felt as though I could control the breathing and that stuff...I was really relaxed about it" (Trans. C2, p. 1).

The theme of control emerged early in our interview. In the labor and delivery process, Bridgette was confident that she would maintain control over her body and emotional state throughout the birthing process. She had no need for emotional support from her husband. Bridgette prepared herself for childbirth by reading and listening to others discuss their birth experiences.

Bridgette stayed in the hospital for three days. Her first impression of her newborn was that she was just beautiful. "I thought she was as cute as a button" (Trans. C2, p. 2). No one noticed a problem right after the birth, but a few hours later Chelsea began developing bruises where

her name tags were attached, and on her head. She was hemorrhaging under the skin. Chelsea was rushed to the ICU and hooked up to an IV. She had a very low platelet count, due to Bridgette's Rh negative blood type. Bridgette commented, "If there could be anything traumatic about this whole thing (it) was just having the baby and thinking she was going to die and not having the doctors know what was wrong with her which was even scarier" (Trans. C2, p. 2).

Although Bridgette had a real scare about possibly losing her newborn, she remained confident that all would be well. She said, "I was really nervous in my gut, but I felt real secure that everything was going well" (Trans. C2, p. 3). The hospital staff was extremely supportive the entire time, and the ICU people were "just phenomenal" (Trans. C2, p. 2).

During the birthing process, Bridgette felt that she had renewed a bond with her own mother. Bridgette replied, "My mother was there, and she cut the cord. So it was a bonding thing just having the two of us go through it, and then having a little girl there, it was kind of a continuous ...just a real connection between my mother and I. It was really nice" (Trans. C2, p. 2).

Social Support

Bridgette was glad when she and her baby could come home. She felt that the first few days were "pretty

easy...just the normal routine, really" (Trans. C2, p. 3). She had a lot of visitors.

Bridgette returned to her self-sufficient ways soon after returning home. Her mother stayed only for half a day, and no one else was there with her during the day. Her husband was home at night. Bridgette felt that she really didn't need any help. "Things were fine, and I felt fine" (Trans. C2, p. 3).

Bridgette considered her spouse and her mother to be her greatest sources of support during the early weeks of motherhood. She found that she received a lot of emotional support in the first three days from them, but there were few calls of congratulation from others who waited to see how things were going with the baby.

Breast-feeding did not go well for Bridgette, and she decided to switch to bottle-feeding thirteen days after getting home. John was not very supportive of breast-feeding. Bridgette explained, "His (first) wife didn't do it. His mother didn't do it. I think if he was more attracted to the whole idea, if he was more encouraging about the whole idea, I might have stuck with it longer, but it was something he was uncomfortable with..."(Trans. C2, p. 8). Bridgette also admitted that she had her own reasons for discontinuing breast-feeding: "...I wanted to lose weight fast, and I wanted to have a drink. I wanted my body back basically" (Trans. C2, p. 8).

Bridgette needed very little social support in the weeks which followed, although support was available if needed from her five brothers and sisters, her husband's family, and from her own mother and spouse. Her mother and husband continued to provide "purely emotional support" (Trans. C2, p. 4), but they would have been there if she had needed any other type of support. "I don't want to take away the credit from them, but I feel that everything is going fine for me, so I'm not in the position where I'm asking for any help" (Trans. C2, p. 4).

Although her husband was working less because it was winter, nothing had changed about the way Bridgette and her spouse shared the workload at home between pre- and postnatal periods. When I asked about his participation in childcare, Bridgette replied, "I do all the childcare basically. He plays with her for an hour or so at night or if I'm tired, but basically I do 99% of it" (Trans. C2, p. 5).

Family members provided more support for Bridgette than the community or her friends during the postnatal period. Support groups were available at the Resource Center of the regional hospital, but Bridgette said, "I'd rather be here raking my leaves than chit chatting and watching other babies" (Trans. C2, p. 4). Few friends visited, but Bridgette received a lot of calls -- "Not any less than normal" (Trans. C2, p. 4).

The Infant

Chelsea's health was good after the first few days. The petechiae and the bruising went down, Bridgette related. At two months, when I asked her to describe her baby to a friend who may have never seen her, Bridgette said, (She's) "Just the most gorgeous little baby you've ever seen...real cute, kind of not much hair on her head...She has a nice, beautiful, round face. I think she is adorable...she is just beautiful. (She has) bright clear eyes...Her temperament is great...Her neck is real strong...She looks around, and she is real alert so I think she is exceptional and beautiful" (Trans. C2, p. 8). She is "real happy...real good...and not fussy at all" (Trans. C2, p. 4).

Maternal Self-confidence

Bridgette was extremely self-confident about her maternal abilities. "There is nothing difficult about being a mother for me...Chelsea is pretty see-through" (Trans. C2, p. 9), replied Bridgette.

The easiest thing for Bridgette to learn about Chelsea was to love her. "Loving her wasn't anything I needed to learn. That is the most fun" (Trans. C2, p. 7). When asked what she felt she did most confidently as a mother, Bridgette replied, "I'm pretty confident about the whole thing, so it is hard to pinpoint it. I'm very confident about taking care of her. Being a good mother...I think I'm going to be a fabulous mother!" (Trans. C2, p. 10).

When I asked Bridgette if there was anything she ever worried about concerning Chelsea, she said that a T.V. show on SIDS (Sudden Infant Death Syndrome), which she had seen recently, caused her to worry that Chelsea would stop breathing. "...you worry about those things, something hurting her, her dying, something that you can't control. I think that is what I worry about -- things that could happen to her that I couldn't control" (Trans. C2, p. 10).

Bridgette felt that her self-confidence had improved since becoming a mother, "Not that I wasn't confident before. I'm a pretty confident person, I always have been, and pretty secure about doing things. I've been a go-getter, accomplishing, doing a lot of things. Just having this accomplishment has made me feel better....and physically getting back in shape...brings up your self-esteem" (Trans. C2, p. 10).

The Quality of the Caregiving Environment

Bridgette never rose during our interview to check on the napping baby nor did she use an infant monitor, which most mothers used when a significant distance from their sleeping child. After an hour elapsed, I became concerned that we might not be able to hear her baby from the patio (door closed) if she cried. I asked if I could see the baby's sleeping quarters. We climbed the stairs to find Chelsea just beginning to awake.

Chelsea was lying quietly wide awake in her crib. Her sleeping loft was sparse: A crib, a changing table, and a chest of drawers. There were no decorations or mobiles on which Chelsea could focus. Bridgette hadn't taken much care to provide a stimulating and cozy environment for her infant.

There was conflicting evidence of Bridgette's emotional and physical involvement with her infant. While observing her with Chelsea after naptime, Bridgette appeared to respond warmly to Chelsea's vocalizations and movements. Earlier, however, Bridgette described her involvement with Chelsea in this way: Chelsea "just eats and sleeps, and I change diapers, basically" (Trans, C2, p. 4). It may be that Bridgette does not often initiate interaction with her infant, but when she does, she knows how to respond.

When Chelsea was awake, Bridgette said that she liked to spend time with her "just for learning" (Trans. C2, p. 5). Bridgette said, "I kind of let her take the lead" (Trans. C2, p. 6). Bridgette had read about the visual development of infants, and showed me pictures and objects which she used to stimulate Chelsea. She said that she often carried Chelsea around the house and yard, talking to her about the sounds of the environment. Bridgette said she enjoyed "watching her reactions and stimulations and what makes her happy" (Trans. C2, p. 7).

Bridgette appeared to recognize some of Chelsea's cues, and used them to adjust the baby's environment. For

example, after traveling for a few days, Bridgette recognized that Chelsea was over-stimulated, and seldom traveled with her after that. Bridgette was aware that Chelsea was sensitive to her mother's emotional reactions, and she consciously tried to be more relaxed about external events when holding Chelsea. In these ways, Bridgette avoided potentially over-stimulating situations and maintained control.

Bridgette was as sensitive to her own needs as she was to Chelsea's. Although she said that she took the lead from Chelsea, and worked around her schedule, Bridgette had adjusted Chelsea's schedule to comply with her own. When Chelsea was two-months-old her schedule was incredibly predictable. Bridgette looked forward to the two hour naps Chelsea took each day; she was able to attend to her own interests.

Although Bridgette expressed an interest in Chelsea's development and learning, I sensed that playtime with Chelsea occurred only when it conformed with Bridgette's schedule. There was little evidence of infant-centered toys, materials, or books in the home. Evidence of adult hobbies and interests were prevalent. I wondered how flexible and responsive Bridgette really was to Chelsea's developmental needs and cues.

Attitudes about Motherhood

Bridgette looked forward to becoming a mother for a long time. Motherhood was definitely as fulfilling as she imagined it would be (Trans. C2, p. 9). Bridgette elaborated, "I've always wanted to have a baby...and be a housewife since I was thirteen. I always just dreamed of this, of being able to not have to go back to work, planting a garden, painting and remodeling, and spending time with myself and my baby. I think it is not just her that is making me so happy. I think it is me finally reaching a dream. Some women dream of great careers and stuff like that...I've been dreaming about having security, feeling as secure as I do...This is probably the best I've ever felt in my life, just feeling like I've finally got it all" (Trans. C2, p. 9).

Motherhood provided Bridgette with more time and opportunities for self-development than ever before (Trans. C2, p. 12). At two months postpartum, her personal goals became more far-reaching, more options were open, and more dreams were developing (Trans. C2, p. 11). She felt she had balanced her attention well between herself, her husband, and her baby. She had more time for herself than ever before. "The only thing I've neglected since having the baby and being pregnant is my dog" (Trans. C2, p. 11), Bridgette replied.

Summary

Bridgette looked forward to motherhood for a long time, embraced it, and was not disappointed. She was content with her new lifestyle and felt secure financially and emotionally.

Bridgette felt very confident in her new maternal role. She derived much of her self-esteem through setting goals and accomplishing them, including maintaining her physical appearance and growing and maintaining a glorious garden. Bridgette viewed her ability to develop a schedule as an accomplishment, as she did her own infant.

There is some doubt as to how supportive Bridgette was of her infant's needs. For example, Bridgette smoked cigarettes in the home, pre- and postnatally; this seems insensitive to her infant's health needs. The distance Bridgette maintained from Chelsea during our interview was either an example of her infant's incredible predictability or of Bridgette's insensitivity to her infant's emotional needs.

Although Bridgette informed me that she was greatly interested in infant development, there was less evidence that she provided a stimulating home environment for Chelsea. Her interaction with Chelsea was appropriate, but the incidence of mother-initiated interaction is questionable.

Social support was important to Bridgette only during the early neonatal period, when Chelsea was ill. When all

was well, Bridgette proceeded to enjoy the dream which she had looked forward to for so long, being home and being a mother. It was a good time in her life-course for Bridgette to become a mother. It was fortunate for her that she did not have a fussy and demanding baby.

Summary and Conclusions

The theme of control emerged over and over again in multiple contexts in my interviews with Bridgette. This theme will now be used to summarize the pre- and postnatal periods and to draw conclusions about Bridgette's maternal adjustment.

Bridgette derived much of her self-confidence from being able to feel in control of her life. As a young woman, she had been financially, physically, and emotionally independent from age eighteen. After becoming a mother, control was still an important issue to her.

For labor and delivery, Bridgette took control by educating herself, not by relying on childbirth instructors. When breast-feeding was not going well, she switched to bottle-feeding. By doing so she was able to maintain control over feedings and control over her own body. When Chelsea's schedule didn't fit with hers, Bridgette altered it gradually to coordinate with her own. Chelsea's schedule became so predictable that Bridgette showed no concern that she would awake during our interview. Bridgette only worried about things over which she had no control.

If Chelsea had been a more difficult, demanding, unpredictable, or unadaptable baby how would this have affected Bridgette's maternal self-esteem and her interaction with her child? Would she have felt in control?

Pre- and postnatally Bridgette relied on very little social support, although plenty was available. Emotional support from her mother and husband were welcome in the early days of motherhood when her baby was ill. This was a situation over which she had no control. In the home, she assumed most household chores and childcare routines, which gave her the feeling of being in control.

It was a good time in her life for Bridgette to become a mother. She had gone through her wild times (when she lacked self-control) and felt ready emotionally to become a parent. Financial security gave Bridgette a feeling of control over her life and the confidence she needed to initiate parenthood.

Bridgette's adjustment to new motherhood did not appear to be difficult from her perspective (maternal self-esteem), but from the point of view of the infant it may be problematic. As her infant grows and changes, there is cause for concern that Bridgette's need for control may lead to an authoritarian parenting style and less sensitivity toward the needs of the emerging child. The quality of the developing mother-child relationship may be at-risk.

Personal Profile IV: Bonnie, Age 39

Maternal Adjustment Achieved through Determination and Social Support

The Prenatal Period

Background

Bonnie was raised in a small rural town in the Midwest in a family of six children; she was the eldest. Both of her parents were college-educated, and came from farm families. Bonnie's mother was also a late-timing mother. She had been an independent career woman prior to marriage and motherhood, and encouraged Bonnie and her other girls to be independent. Bonnie said of her mother, "The one thing that she impressed upon us very, very strongly was that we have to be independent -- the women, the girls in the family...We had to be able to support ourselves, we had to go to college, we couldn't depend on a man necessarily" (Trans. D1, p. 1). Her mother's advice shaped Bonnie's early adult years and became a critical issue for Bonnie in her maternal adjustment.

Bonnie's childhood relationship with her parents left bitter memories -- of a father who was the "classic absent father...very quiet and silent...(who) ruled with an iron thumb...but...didn't say much" (Trans. D1, p. 3), and of a mother who was not emotionally supportive of her children. Bonnie participated in therapy for five years during her

mid-thirties to resolve unhappy feelings about her childhood relationship with her parents.

Bonnie went to college in the Midwest, and received a degree in child development. She taught nursery school for a while "and that was an utter failure" (Trans. D1, p. 2). She then became a play lady on the pediatric floor of a hospital. That job didn't last very long either. "I was freshly out of college and a little cantankerous and a little arrogant, and didn't get along with my boss, so she too said she would not recommend me to even sweep streets" (Trans. D1., p. 2). Bonnie attributed her job losses to being headstrong, and "very committed to (my) own stuff" (Trans. D1, p. 2).

Bonnie's succeeding jobs did not revolve around interpersonal relations with children or other people. She became a file clerk and then a technician in an eye doctor's office, which led to a job in a pharmaceutical company doing research. There she met her husband.

When I first met Bonnie, she was lying down on her living room couch, and there she remained for the duration of our interview. Her voice was barely audible so I sat near her on the floor. Books, dishes, and assorted paraphernalia for quilting were piled in various locations throughout the house. Bonnie was thirty-nine years old, the oldest of the mothers in the sample.

Bonnie and her husband, Mike, age thirty-two, were married just a year at the time of our first interview.

They decided to have a baby early in their marriage because Bonnie was thirty-nine, but they never expected Bonnie would become pregnant so soon.

Bonnie's first reaction to her pregnancy was disbelief. Mike reacted with disbelief, but also with excitement. He said, "Oh my goodness, oh wow, oh boy" (Trans. D1, p. 15).

Prenatal Attitudes

At the beginning of the pregnancy, Bonnie didn't feel emotionally ready to have a baby. She didn't feel completely "safe" in her marital relationship. When I asked her what she meant by "safe" she said not being hurt emotionally, or safe to be herself and not worry that she would be rejected (Trans. D1, p. 6). Bonnie wanted to be sure it was okay to be herself.

At eight months into the pregnancy, Bonnie blamed her earlier feelings of insecurity on hormones, and said she now felt wonderful about her marital relationship. She did feel ambivalent about becoming a parent, however. Bonnie wanted to explore the world, but, she related, "I was screaming baby, baby...my biological clock was going cuckoo so we had to do it" (Trans. D1, p. 7). She felt more ready to be a parent at thirty-nine, however, than she had felt at age thirty-six.

Bonnie felt both "totally frightened" and "extremely excited" about becoming a mother. It is "such an incredible gift to be given...and such an incredible responsibility to

be the mother of this child. It's both awesome and frightening" (Trans. D1, p. 17). Bonnie said that she had played enough and was willing to make sacrifices, "albeit a little grudgingly" (Trans. D1, p. 16).

During her eighth month of pregnancy, Bonnie had concerns which revolved around losing independence and control over her own life. "I thrive on routine...I'm not looking forward to having a totally disrupted, unroutine day. That's going to be hard" (Trans. D1, p. 17). In addition, she said, "I'm a very extroverted person, and I need a lot of external stimulation. I'm sure the baby will not be able to give me...the kind that I need, so I will have to create something" (Trans. D1, p. 19).

Bonnie was also concerned about how the baby would impinge on her developing marital relationship and the spontaneity she and Mike had to do things and to travel.

Bonnie was not concerned about the instrumental details of preparing for the baby, but she committed a lot of time and energy to preparing for motherhood emotionally. Bonnie prepared for motherhood by attending childbirth classes, support groups, and by working on her marriage. Although they had no bassinet or car seat, at eight months into her pregnancy Bonnie felt "prepared enough" for the baby.

Social Support

Bonnie did not have an emotionally supportive relationship with her parents as a child, and recognized

that emotional support was what she needed now to prepare for motherhood. Bonnie's parents, husband, and pregnancy support group provided some emotional support during her pregnancy, but it was not enough. She did not feel the love and support she needed until she had to go on bedrest in her ninth month.

Bonnie's parents were "thrilled...excited, (and) happy" (Trans. D1, p. 5) to hear of her pregnancy. They visited for an extended period of time, made frequent phone calls, and corresponded by mail. "They always listen and are very supportive in a non-intrusive way, they are just absolutely there" (Trans. D1, p. 5), Bonnie commented. Bonnie's mother, however, expressed doubts that Bonnie could be fulfilled by parenthood because of her independent nature and self-centeredness. Her mother's doubts reinforced her own, and without the reassurance that she would feel fulfilled in motherhood, Bonnie sought emotional support from others.

Bonnie's husband, Mike, was supportive of her during the pregnancy. He was thrilled at the prospect of becoming a father. Mike shared the indoor chores almost equally during the last trimester of pregnancy, although the division of labor was intended to be a traditional male/female distribution. When household chores became harder for Bonnie during the last month, Mike did most of them. The early postnatal division of household labor was negotiated at this time. They agreed that Mike would do all

of the housework except laundry for the first month postpartum. After that however, they planned to resume their original traditional division of labor.

Mike and Bonnie also discussed father participation in childcare during the last trimester of pregnancy. Mike was not very flexible about changing his own routines. He treasured the time he had to relax upon returning from work. Mike's lack of interest in childcare may have contributed to Bonnie's lack of emotional readiness to become a mother.

Bonnie's closest friends lived on the west coast, and one of them was also pregnant and due a few weeks before her. Going through a first pregnancy at the same time as a friend was a form of emotional support for Bonnie. Bonnie regretted that a relationship with another friend who was childless had changed. Communication from her decreased considerably after Bonnie became pregnant.

Reaction to Bonnie's pregnancy from the workplace was devastating. When she was six months along she told her boss that she was pregnant. "Once I told them I was pregnant, it was as if I became invisible. It was the most bizarre thing I've ever experienced" (Trans., D1, p. 12). Bonnie was asked to resign her position before the end of her pregnancy, and was informed that her pay would be cut. Workplace support was "totally negative" (Trans. D1, p. 13). When her boss realized that Bonnie was gathering written evidence of sex discrimination, he relented.

Bonnie was a newcomer to the community when she became pregnant. Community and church-sponsored activities were family-centered; these institutions did not provide the support during her pregnancy which Bonnie had expected.

The pregnant women whom Bonnie met in the community were quite negative about their pregnancies. She said, "That's not fun to listen to when you are pregnant for the first time" (Trans. D1, p. 9). Instead of receiving support from these experienced mothers, Bonnie became a source of support for the most negative of them.

Bonnie found little support in her community during the prenatal period. Bonnie explained, "I had always been extremely creative and successful in creating a broad-based support group because that was always very important to me, since I was so far from family...so looking out and seeing that there wasn't a lot of things easily accessible, I just focused on Mike...it has been real tough because everyone is a young family, younger couples with families, and...we had nothing in common" (Trans. D1, p. 10).

Because there was so little support available to her, Bonnie initiated a pregnancy support group of three to six women, who met every week for twelve weeks. They were all late-timing women in their thirties, who came from very different backgrounds. Four were not married.

One and a half weeks after our first interview, Bonnie was put on bedrest due to excessive swelling. After becoming bedridden, she had "a rather far-reaching and

caring support group that has been rallying for me" (Journal, p. 1). The members of her church and her pregnancy support group were there whenever she asked for help. "It's amazing the calm and strength I'm deriving from the outpourings of love, kind deeds, prayers from my friends, family, and even strangers. I'm learning how to be loved and supported in a new way -- at a deeper 'community-involved' level" (Journal, p. 2). The emotional support that Bonnie had needed during the pregnancy period finally materialized.

Attitudes about Maternal Age

Although socially and biologically the pregnancy had not been without its drawbacks, Bonnie was glad that she had waited until age thirty-nine to become a mother. "I just feel that by this time, I just have so many life experiences and am so much clearer with who I am that I just have a whole lot more clarity and respect for a child" (Trans. D1, p. 20).

A friend made this comment to Bonnie about her maternal age at first birth: Thirty-nine "is a good age to do it (have a baby) if you only had the energy that you had when you were younger, but now you have the wisdom that you didn't have" (Trans. D1, p. 20).

Summary

The theme of independence was woven throughout Bonnie's prenatal interview and journal, and will now be used to summarize events and feelings which preceded childbirth.

Bonnie was encouraged to be independent, both financially and emotionally, from early childhood. She commented, "I spent thirty-eight years independent and self-sufficient and taking care of everything for myself" (Trans. D1, p. 1). Combining marriage and first-time parenthood in one year presented a potentially large loss of independence for Bonnie.

Being independent also implies avoidance of emotionally dependent relationships. Bonnie didn't form am emotional attachment to her own mother until her pregnancy, and then it was not a deep emotional relationship, but a warm and caring friendship. She avoided long-lasting relationships with men (most likely because of her negative relationship with her father) until her childbearing years were almost over; she was afraid of getting hurt (Trans. D1, p. 6).

Bonnie found early employment opportunities difficult to maintain because of her independent nature, which she described as her own headstrong self-centeredness.

Bonnie's greatest concerns about becoming a mother revolved around losing independence. She worried about losing spontaneity and the ability to follow her own routines. She was equally frightened of the responsibility of being a mother.

Bonnie prepared herself for motherhood through developing closer relationships with others (her mother and her husband), and by initiating a support group where she could share her concerns and fears. Bonnie understood her own emotional needs and took action to address them. By the end of her pregnancy Bonnie said she felt "prepared enough" for the baby and motherhood. She still had lingering concerns, however, about losing her independence.

The Postnatal Period

Labor, Delivery, and Hospital Stay

Bonnie spent most of her labor at home. It was not until transition that she felt she should go to the hospital which was over an hour away. It was a long arduous ride over icy backroads to the hospital. Once there, Bonnie felt the urge to push.

The doctor and midwife arrived just in time to deliver the baby. There was no time for a non-stress test or blood pressure check. There was some concern about infection since there was no embryonic fluid surrounding the baby. The baby appeared healthy at birth, however, and all was well. It was "quick and easy for me" (about three hours in all) (Trans. D2, p. 2), Bonnie said of her labor and delivery.

Bonnie and her husband, Mike, spent an hour getting to know their new baby before he was taken for tests. "During that hour he also got on Mike's bare chest and bonded with

him, and listened to his heartbeat, smells, and texture" (Trans. D2, p. 3).

Bonnie's first impression of her baby came during the delivery process. When part way delivered, she reached down to feel his head, and gasped in a worried tone, "Oh, no, he's a cone head!" (Trans. D2, p. 3), and on the second day of life, Bonnie described her baby as "uncontrollable" (Trans. D2, p. 4).

In the hospital Bonnie received a lot of attention and all the information about infants she wanted. She was the only new mother there. Although the staff was very supportive, she felt there wasn't enough information or education about breast-feeding, particularly foods which will effect the baby through breast milk. Bonnie was given broccoli and spicy foods during her stay at the hospital.

First Days at Home

The first days at home were "pretty unsettling" (Trans. D2, p. 6). Baby Andrew had a high bilirubin count, and needed to return to a local clinic at eight a.m. for four days. It was not until the end of that week that Bonnie realized "how stressful...how absolutely tiring...and how inappropriate that was" (Trans. D2, p. 6). Andrew cried a lot that week, but he was also sleepy.

The Infant

Bonnie's perception of her infant during the first six weeks was quite different from her perception of him during the two weeks which followed. "Before week six, he cried unconsoledly almost all the time, rarely slept during the day, and for short periods only at night; he was miserable and very high need. So were we!!" (ICQ questionnaire). When Andrew was one month old, Bonnie wrote in her journal, "If anyone had told me I was going to have a high need, gassy baby, and how much energy was needed to minister to the baby, I may have reconsidered. Thursday, my husband and I were ready to commit suicide and give the baby to an orphanage. Surely I have more patience and am more philosophical as a thirty-nine-year-old than I would have been as a twenty-nine or even nineteen-year-old?!" (Journal, p. 2).

After Bonnie eliminated wheat from her diet, and began feeding her baby on demand, Andrew was a different baby. "Things changed dramatically once I started feeding, literally, whenever he cried" (Trans. D2, p. 6). At eight weeks, Bonnie described her infant as "not the crying baby anymore" (Trans. D2, p. 10), but "bright-eyed and alert, just loves to be held by people, and takes it all in" (Trans. D2, p. 8).

Maternal Self-confidence

Bonnie's feelings of maternal self-esteem appeared to be dependent upon her ability to successfully read her infant's cues. The most difficult thing for Bonnie to accept about herself as a mother (Trans. D2, p. 13) was that she had not recognized Andrew's sensitivity to particular foods, or his need to breast-feed on demand. She felt guilty and "illiterate" (Trans. D2, p. 7) in retrospect that she had let Andrew cry so much during his early weeks of life.

Although disappointed that she could not read Andrew's cues and interpret his needs sooner, at eight weeks Bonnie felt much more confident about her maternal ability. She felt most confident about her abilities to "handle him" and read his cues (Trans. D2, p. 14). Pride in herself as a mother was obvious and observable as Andrew responded to her facial gestures and language with some of his own. As she and her infant developed a system of communication, and she received feedback from him, Bonnie's maternal self-esteem flourished.

At eight weeks postpartum, Bonnie had only two concerns about her parenting ability. She was concerned about recognizing new developmental stages as they occurred, and providing appropriate stimulation for Andrew as he grew.

The Quality of the Caregiving Environment

During my observation, Bonnie was alert to cues from Andrew for sleep, food, and play. She appeared relaxed as she fed Andrew, held him, and put him down for a nap. When he was awake and alert at the end of our interview, she engaged him in play appropriate for his age. There was a warm and loving communication between Bonnie and her son. Bonnie appeared confident while meeting her infant's needs for food, sleep, social interaction, and exploration.

Bonnie expressed disappointment that she was not able to read Andrew's cues sooner. She attributed this partially to his immature nervous system and partially to her own ignorance.

During the second month, Bonnie said their communication skills improved: "We've been working very hard, both of us trying to give cues..."me training him and him training me" (Trans. D2, p. 13). Bonnie recognized that she and Andrew were both responsible for achieving communication which would enhance their relationship.

Bonnie and Andrew developed routines appropriate for different stages of alertness. When he was quiet and alert they did "mirror work", where they talked, played, and smiled back and forth. "If he coos, I'll coo back at him" (Trans. D2, p. 12), Bonnie said. Batting at a ball and rattle attached to a car seat also became a new routine. When Andrew was sleepy, Bonnie would put him in his car seat, and off they would go to the Y, where Andrew would

sleep and observe as his mother worked out. During Andrew's most disorganized times, when he is not able to comfort himself and the rocking chair wouldn't do, Bonnie would put him in a swing where he could "chill out, desensitize, (and) destimulate..." (Trans. D2, p. 13). Bonnie was sensitive and responsive to Andrew's changing needs, provided appropriate attention and play materials, and exposed him to new people and new experiences inside and outside of the home.

Social Support

Bonnie received many different types of support from several different sources, and said that she "needed all of the support" (Trans. D2, p. 7) which she received. "All of it has been helpful and adequate. Bits and pieces were not adequate when I got them, but within six weeks it was all helpful and adequate" (Trans. D2, p. 8).

Bonnie sought informational support to help her understand her baby. Information from books about feeding intervals was misleading, and easily misinterpreted. "I just kept asking and asking, and looking and looking until I found the answers" (Trans. D2, p. 8), Bonnie said. Bonnie called her friends almost daily about Andrew's crying. They were compassionate, offered ideas, and loaned her a swing. She spoke with members of her pregnancy support group and her mother often during the first three weeks. Bonnie's sister was her greatest support; she called every three or

four days to see how things were going. A mother's helper visited often, and suggested feeding Andrew whenever he cried. Informational support from experienced mothers was critical to Bonnie and more helpful than advice from her pediatrician or the books she read, which were misleading and unreliable.

Bonnie's husband was an extremely helpful source of support, both emotional and instrumental, especially during the first four weeks. He was her greatest source of moral support, although at times he felt as helpless as she. For the first month of parenthood, Mike did all of the household chores, except laundry. After four weeks, Bonnie returned to doing it all, as they had agreed during the latter part of pregnancy. "We did have an agreement that I would not make demands on him (after one month) because he did everything for two months (including last month of pregnancy). He was just...he is still overwhelmed, but his overwhelming was intense because he did everything" (Trans. D2, p. 10), Bonnie explained.

Bonnie implied that she could not have adjusted as well as she did to her high need new baby without the support she received from her friends, her spouse, her sister, and the mother's helper who visited frequently. This was a social support network which Bonnie had created; it wouldn't have existed if Bonnie had not actively sought help. Some of her postnatal support had been solicited and negotiated during the prenatal period including the division of household

labor and the pregnancy support group which continued to meet every two weeks.

By six weeks postpartum, Bonnie had received the support she needed to understand her baby's needs and to make a positive adjustment to new motherhood. Baby Andrew then became his mother's central source of support and maternal self-esteem. His social communication gave Bonnie the feedback she needed to know she was meeting his needs.

Attitudes about Motherhood

Bonnie found motherhood both different and better than she thought it would be. "I didn't think it would be as rewarding"..."I had real reservations how I could essentially stand to be a human milk machine and just do nothing all day..."I couldn't imagine the bonding and the love that I'm feeling" (Trans. D2, p. 15). "I can't imagine what would be more compelling and satisfying now than taking care of this baby" (Trans. D2, p. 9).

Bonnie was concerned that parenthood would affect her marital relationship, her individual life and career plans, and their plans to travel. At times she felt tied down by motherhood: "I'm not my own at the moment" (Trans. D2, p. 16). At eight weeks postpartum, Bonnie felt positive about motherhood, yet concerned about the future. "So far, so good" (Trans. D2, p. 10), she replied.

Summary

At eight weeks postpartum Bonnie appeared well-adjusted to new motherhood. She looked physically well, and appeared to thrive as a new mother. Her relationship with Andrew was warm, sensitive, and reciprocal, and she provided a stimulating and appropriate learning environment for him.

Bonnie continued to receive social support from a mother's helper who visited the home. This was an indication that she needed reassurance of being a capable and competent new mother. The mother's helper also provided outside stimulation for her which, prenatally, Bonnie had indicated she would need.

At eight weeks postpartum, Bonnie was content with motherhood. She was surprised that she could become as emotionally bonded to her new baby as she was. Bonnie was unsure, however, if feelings of contentment would later be replaced by feelings of resentment about being tied down. She wondered if her marital relationship would thrive, and if personal and career needs would be met.

There was much change during the first eight weeks of new parenthood for Bonnie, Mike, and Andrew. The greatest challenge for Bonnie was interpreting her baby's needs during the first six weeks. Once Bonnie was able to do this, with the advice of experienced mothers, her adjustment to new motherhood proceeded smoothly.

Summary and Conclusions

Bonnie put off marriage and parenthood because she was afraid of losing independence and of being emotionally dependent upon others. Bonnie attempted to resolve these issues which evolved in childhood before becoming committed to two long-lasting relationships, marriage and motherhood.

It was with opposing feelings of trepidation and excitement that she anticipated new motherhood. Bonnie was both ready and not ready emotionally to become a mother. If it had not been near the end of her childbearing years, she might have waited longer to become pregnant.

Issues of independence and control were of great concern to Bonnie during the prenatal period. They became latent, but did not disappear with the birth of Andrew.

Prenatal anxiety about new motherhood led Bonnie to seek social support during the pre- and postnatal periods. Bonnie found postnatal social support extremely necessary when she discovered she had what she described as a high need baby.

Bonnie's maternal self-esteem suffered during the first six weeks of motherhood as she attempted to discover the cause of Andrew's incessant crying. With the help of other mothers she was able to identify the source of Andrew's irritability. By eight weeks postpartum, Bonnie was able to read and respond appropriately to her infant's cues and communications. When Andrew began responding to Bonnie's

efforts, Bonnie's maternal self-esteem improved. She provided a sensitive, responsive, appropriate, and stimulating home environment for her infant.

Bonnie's adjustment to new motherhood was guided by her prenatal attitudes, but was primarily affected by her perception of her infant. Bonnie's maternal self-esteem during the early postnatal period was low when she perceived her infant as difficult. With a combination of emotional, informational, and instrumental support from a variety of people, Bonnie came to understand her infant's needs, which led to the development of a reciprocally responsive relationship between herself and Andrew. Bonnie's confidence in her maternal abilities improved, and she was able to provide an appropriate and stimulating home environment for Andrew.

Summary and Conclusion of the Maternal Adjustment of Four Late-timing Mothers

The personal profiles of the late-timing mothers in this chapter represent four different styles of maternal adjustment, which varied by degree of difficulty. Among the late-timing mothers, these were perhaps the least typical styles of maternal adaptation. The profiles are an indication of the variability in styles of maternal adjustment in the sample of twenty late-timing mothers.

The profiles show that the process of maternal adjustment was not the same for all, and it was not easy for

all, although the quantitative results give that impression. The qualitative profiles show that it was a combination of infant qualities (temperament and responsiveness), the mother's personal psychological resources (prenatal attitudes about motherhood and maternal self-esteem), and the presence or absence of helpful social support (instrumental, informational, and emotional) when needed which determined the ease of adjustment.

Maternal adjustment proceeded smoothly when the mother's personal psychological resources were intact, but when they were not and the infant was fussy or difficult, appropriate social support contributed to a positive adjustment, and led to a sensitive and responsive mother-infant relationship. A combination of negative prenatal attitudes about motherhood, the perception of negative temperamental attributes in the infant, stress, and inadequate social support led to low feelings of maternal self-esteem and a mother-infant relationship at-risk for attachment. The profiles show that maternal adjustment for all of the mothers was a dynamic process determined by the interaction of several systems over time.

Although there was little relationship between their actual experience and reflections about late-timing motherhood, the mothers all felt that it was far better for them to have initiated parenthood at age twenty-nine or older rather than at a much younger age. The mothers felt that age brought a variety of experiences to enhance the

mother-child relationship. They felt they had pursued opportunities for personal growth and were more patient and financially stable than they would have been at a younger age. It is likely that the mothers were looking at the total parenting experience, not only at the early weeks of parenthood.

The two oldest mothers spoke of disadvantages of being older at first birth. Both found their pregnancies and early postnatal periods to be physically demanding. Both needed medical intervention. Both felt the pressure to have another child (if they wanted one) before it was too late.

All mothers advised waiting until you feel ready and want to be a mother before initiating parenthood.

This chapter of personal profiles will now end with a brief summary of each profile. The mothers' scores on quantitative measures are located in the appendix.

Profile I: Maternal Adjustment: Incomplete

Jane's difficulties in adjusting to new motherhood seem mild in comparison to Suzy's, but when viewed alone, there is also cause for concern that she was under a lot of stress, and that her relationship with her infant would suffer.

Jane looked forward to new motherhood, albeit with apprehension. Prenatally she was unsure of her ability to develop a warm emotional tie with a daughter and of her

ability to parent an adolescent when she had no mother model in her own adolescence. Positively perceived prenatal support from family, friends, and the workplace encouraged her to look forward to motherhood.

After the baby was born Jane's idealism was extinguished. The baby was extremely irritable and difficult to soothe. Support from her mother-in-law, which she perceived positively in the prenatal period, she found invasive and threatening during the postnatal period.

The most distressing part of new motherhood for Jane was being separated from her new baby at five weeks postpartum when she returned to work. This separation hindered Jane's ability to recognize and respond appropriately to her infant's cues and communications. Jane demonstrated her love for and pride in her new baby, but her feelings of maternal competence were very low at eight weeks postpartum. Maternal adjustment was incomplete at two months.

Profile II: Maternal Adjustment At-risk for Interactional Difficulties with the Infant

Suzy delayed her pregnancy until age thirty-seven, when she began to think that she would be sorry in the future if she didn't have a child. She felt no desire or need to parent. She worried about losing independence and spontaneity once the baby was born.

Suzy had a difficult birth and felt very depressed after the baby was born. She did not want to leave the hospital. She and her husband were sick with the flu when the baby was six to seven-weeks-old.

Suzy had little help from others in the form of emotional, informational, or instrumental support after the first week at home. Her mother lived in Hong Kong, and was not able to be with her. Her husband helped out with housework and childcare occasionally, but she did most of the work.

Suzy found her infant to be extremely demanding and difficult to soothe. She felt inadequate as a mother, and provided little stimulation, outside experiences, or emotional warmth for her child. Suzy was in the midst of a very difficult adjustment to new motherhood, and was at-risk for interactional difficulties with her infant. She desperately needed intervention, but she did not perceive herself as being so needy.

Profile III: A Less Difficult, although Potentially Problematic Maternal Adjustment

There was no doubt from the moment I met Bridgette that she would have anything less than a positive adjustment to new motherhood, from her own perspective. The only factor which might have altered this pattern was having a baby who was truly needy.

I met no mother who appeared to look forward to motherhood more than Bridgette. She was extremely happy in her marital relationship and had supportive relatives nearby, but more than that, she was so sure she was going to be a great mother. Bridgette was extremely ready for motherhood, and had very positive attitudes about becoming a mother.

Her independent nature worked in a positive way to prepare her for new motherhood. Bridgette was not afraid of losing her independence. She saw motherhood as an opportunity to become more independent. She would have the time to pursue hobbies for which she never had time. She foresaw the possibility of starting her own home-based business. Becoming a mother was a means to several ends, and the new baby was a precipitator of that new-found independence.

Bridgette came from a family of several children and was not worried about assuming a maternal role. It was very familiar to her, although distant. Bridgette's independent nature and positive feelings of self-esteem precluded the need for social support. It was there if she needed it (Her family lived nearby.). Bridgette had extremely limited help from her husband in the division of household labor and in childcare routines, but that was fine with her.

At eight weeks postpartum, Bridgette was well in control of her own maternal adjustment. She perceived her new baby as easy, sociable, adaptable, and predictable.

Bridgette was able to construct a schedule and set of routines for the baby and herself. This new baby fit well into Bridgette's new lifestyle.

Bridgette's relationship with her new baby appeared warm and caring. She spoke of games they played together, and of books she had read about infant development. There was little evidence, however, of maternal sensitivity to her infant's individual needs. It was clear that the baby hadn't caused any upheaval in Bridgette's life.

Bridgette was able to tend to her own needs and the physical needs of her family with little effort. She felt positive about her ability to handle new motherhood so well. The transition to parenthood for Bridgette assumed a surreal quality. Was it really that easy? What would maternal adjustment look like for Bridgette had Chelsea been a different type of baby? What will it look like when Chelsea begins to walk or when she turns two? "Apparently" Bridgette had adjusted well to new motherhood by two months postpartum, but the future may be problematic for both Bridgette and her infant.

Profile IV: Maternal Adjustment Achieved through Determination and Social Support

At the end of the prenatal period, it looked as though Bonnie would have a very difficult adjustment to new motherhood. She was apprehensive about becoming a new mother; she was terribly afraid of losing her independence,

and of being emotionally dependent upon others. She realized she had two dependent relationships to work on simultaneously, her recent marriage and new motherhood.

Bonnie had recently moved to a new community, a family-centered New England community quite different from the welcoming atmosphere in the Midwest where she was raised. She felt like an outsider, was far removed from family and friends, was unsure of her new marital relationship, and had ambivalent attitudes about motherhood. She desperately needed and sought support. As she received it, her attitudes about becoming a mother became more positive.

Bonnie became the mother of a baby who cried constantly for six and a half weeks. She was determined to find the cause of his irritability. She exhausted all areas of informational support, and finally found the answers to her son's distress within the wisdom of experienced mothers whom she consulted. Bonnie persisted, with the help of a complex social support network, to read and respond to her infant's cues and communications. As the baby became more organized (He weighed five-and-a-half pounds at birth and was born two weeks early.), and as she altered her diet and the schedule of feeding, maternal adjustment proceeded more smoothly.

Mother and son developed a sensitive, responsive, and reciprocal interdependent relationship. Bonnie provided much love, caring, and stimulation for her baby. Her maternal self-esteem grew as her infant responded to her efforts in meeting his needs.

Bonnie achieved a positive maternal adjustment through determination, social support from others, and emotional turmoil, but for her it paid off in a wonderfully warm and reciprocal mother-infant relationship.

CHAPTER 6

DISCUSSION

Becoming a parent for the first time constitutes one of the most significant transformations in a woman's life. Changes in lifestyle, values, goals, relationships, and responsibilities often accompany the transition to parenthood.

While there is a large body of research about the transition to parenthood of mothers of traditional child-bearing age, little is known about what contributes to the maternal adjustment of first-time mothers who are in their late twenties and older. This study was designed to provide information which will increase our understanding of the process of maternal adjustment of women who initiate parenthood at a later age.

The goals of this study were: (a) To describe the process of maternal adjustment for a sample of primaparous late-timing mothers, and (b) to examine the relationship between late-timing motherhood and the variables of maternal self-esteem, the quality of the caregiving environment, maternal perception of infant temperament, and social support. We wanted to discover how the mother, the infant, and social support contributed to the process of maternal adjustment for the late-timing women.

The descriptive data show that the transition to parenthood was not a difficult transition for most of the

late-timing mothers. Prenatally, most of the mothers had planned for the pregnancy (80%), felt ready (95%) for parenting, felt prepared for the baby (85%), and looked forward to motherhood (95%). Most were satisfied with the support they received before and after the baby was born, felt confident in their newly-acquired maternal role, found their babies adaptable, somewhat unpredictable, not difficult or dull, and provided a sensitive, responsive, stimulating, and supportive home environment for their infants during the early infancy period.

Maternal adjustment was not smooth for all, however. There were varying degrees of difficulty depending on the mother's personal psychological resources, the infant, stress, and social support, as the personal profiles have shown.

Now we will examine in more detail the maternal adjustment of the late-timing mothers in terms of maternal self-esteem and the quality of the caregiving environment. Then we will discuss contributions of the infant and social support to the mothers' maternal adjustment. This will be followed by a discussion of the results of the hypotheses and the post hoc analysis. Conclusions, limitations, and implications of the study will complete this chapter.

Maternal Self-esteem

Most of the late-timing mothers in this study had positive feelings of maternal self-confidence. As a group

they had a higher level of maternal self-esteem than other younger samples. The late-timing mothers felt more confident in their maternal role than a sample of younger pre- and full-term mothers from Rhode Island (McGrath, 1989), whose maternal self-esteem was described as moderately high and comparable to that of the norm group of the MSI (McGrath, personal communication).

Differences in demographic characteristics of the samples may account for some of the difference in maternal self-esteem. The late-timing mothers were not only older, but were better educated, and were from a higher socio-economic status than the mothers in the norm group or the McGrath sample. Age, education, SES, and parity were the most distinguishing maternal characteristics.

Infant bio-medical status and a higher percentage of optimal deliveries may also account for some of the difference in maternal self-esteem between the late-timing sample and the McGrath and norm group samples. The infants of the late-timing mothers were all born within two weeks of term; most were delivered without complication; all were in good health within a few days. The late-timing mothers began motherhood from an optimal medical context.

Now that we have examined maternal feelings of self-esteem in the context of demographic data and in comparison with other samples, we will now proceed to an examination of the other component of maternal adjustment, the quality of

the caregiving environment which the mother provides for her infant.

The Quality of the Caregiving Environment

The late-timing mothers provided a home environment which was emotionally, cognitively, and socially supportive of their young infants, and initiated a sensitive and responsive relationship with their infants. Most late-timing mothers were emotionally and verbally responsive to infant cues, avoided restriction and punishment, organized a stimulating and developmentally appropriate environment, and provided opportunities for variety in daily routines. During observations, most mothers were actively engaged with their infants, and did not rely on toys or play equipment for infant stimulation. Their infants appeared more interested in their mothers' expressions and rhythmic movements than in the unresponsive stuffed animals in their cribs.

The late-timing mothers scored significantly higher than the younger norm group on all factors but one of the HOME Inventory. Although they provided fewer appropriate play materials, the late-timing mothers engaged in prolonged periods of face-to-face interaction and cuddling. It can be argued that it was more appropriate for the late-timing mothers to hold and comfort their infants of that age than to surround them with toys.

The results of the HOME Inventory demonstrate what other researchers (Ragozin et al, 1982; Richardson, 1982) have previously concluded: Older mothers interact in a qualitatively different way with their infants than mothers who are younger.

It must be acknowledged, however that the HOME Inventory was standardized with both first-time and multiparous mothers and infants from a lower socio-economic status than the late-timing sample.

The Contribution of the Infant

In the postnatal period the following relationships were discovered between variables often associated with maternal adjustment. Maternal self-esteem was found to be significantly related to (maternal perception of) infant temperament. A relationship was also discovered between maternal perception of infant temperament and the quality of the caregiving environment. These findings suggest that the infant of the late-timing mothers made a significant contribution to their maternal adjustment.

The late-timing primiparous mothers found their infants to be significantly less dull and more unpredictable, but no more difficult or unadaptable than the younger and more experienced norm group of the Infant Characteristics Questionnaire (Bates et al, 1979). The late-timing mothers may have found their infants to be less predictable due to their relative inexperience with infants. Additionally,

infants at two months of age may not have yet settled into predictable patterns of eating, sleeping and eliminating. Experienced mothers may be better able to anticipate infant cues and needs.

Infants who are perceived as unpredictable may also seem less dull. The recent interest in social interaction which the two-month-old demonstrates in the form of smiling, gestural communication, and other attachment behaviors may have influenced the late-timing mothers' perception of him as a socially responsive and interesting (not dull) person. In addition, older first-time mothers who have waited longer to have a child may be more receptive to infant communication than younger or multiparous mothers. They may be more available to recognize and respond to the social capabilities of the young infant, thereby, opening up avenues of reciprocity.

Maternal characteristics of low extraversion, low achievement orientation, and lower occupational level have been found to be predictive of maternal ratings of infant difficultness (Bates et al, 1979). The late-timing mothers in this sample could be considered high achievers; most were highly educated and held supervisory positions in the workplace. It may be assumed that they were fairly extraverted, assertive women. Personal characteristics, including achievement orientation, occupational level, and assertiveness, help to explain why most late-timing mothers perceived their infants as interesting (not dull) and not

particularly difficult, although they were inexperienced mothers.

In sum, most late-timing mothers found their infants interesting, social, active, alert, adaptable, not unusually difficult, but somewhat unpredictable. The findings suggest that both the personal characteristics of the late-timing mother and the developmental characteristics of the infant at two months present a potentially positive picture for maternal adjustment and the developing mother-infant attachment relationship.

The Contribution of Social Support

Social support has been implicated as a critical contributor to the maternal adjustment of first-time mothers of more traditional childbearing age (Shereshefsky & Yarrow, 1973; Crnic et al, 1983; Crockenberg & McCluskey, 1986; Parke & Tinsley, 1987). Descriptive and qualitative studies with late-timing parents (Daniels & Weingarten, 1982; Barber, 1982; Schlesinger & Schlesinger, 1986) have found that spousal support with household work alleviates stress and eases maternal adjustment, particularly if both parents are working outside of the home. A pilot study (McMahon, 1989) with late-timing expectant parents during the last trimester of pregnancy found that the women relied on their spouses for help with household chores, and counted on their help increasing after the baby was born.

With these findings in mind, the question was asked: What percentage of the household labor do spouses of late-timing mothers contribute pre- and postnatally, and is this related to the maternal adjustment of the late-timing mothers? This study revealed that the division of labor in the home looked very much the same pre- and postnatally. Spouses participated in approximately thirty percent of the household chores during both periods. Prenatally mothers had anticipated receiving more help with household chores during the postnatal period, but most were satisfied with the support they did receive. Most of the late-timing mothers had not yet returned to work at two months postpartum, but did expect the division of labor to shift when they returned to the workplace.

It is likely that domestic roles were negotiated and agreed upon long before the pregnancy period and were less likely to change; the late-timing couples had lived together an average of 6.5 years prior to the birth of their first child. Daniels and Weingarten (1982) came to a similar conclusion in their research: Prenatal patterns of reciprocity may have influenced the division of household labor postnatally for couples who had delayed childbirth.

Although most of the late-timing mothers were satisfied with their role arrangements at two months postpartum, many of the arrangements were not egalitarian. The same may be true for this sample as Cowan and Cowan (1988) concluded about the first-time parents in their research:

Satisfaction with the way the division of labor was negotiated may have been more critical than an egalitarian division of labor.

While there was not much change in the percentage of spousal participation in the division of labor from pre- to postnatal periods for the whole group, a notable change occurred in spousal participation for younger and older mothers in the sample. Spousal support in the division of household labor increased from pre- to postnatal periods for younger mothers, but decreased for older mothers. The older the mother the less she was concerned with details of cribs, a clean house, or help with childcare, and the more she wanted to be reassured of her own personal worth and her ability to care for her infant, and the more she needed informational support.

The spouse was the mothers' most helpful and most frequent source of social support. Most often this was in the form of emotional support. Spouses provided more of the type of support which most late-timing mothers needed, emotional support, than any other person in their social support network. The mothers in both age groups appear to have communicated their social support needs to their spouses.

Younger mothers tended to receive helpful prenatal support more frequently from their social support networks than older mothers, while older mothers received significantly more helpful support from their spouse

postnatally than younger mothers. Additionally, younger mothers tended to have more members in their social support network, while older mothers often relied exclusively on their spouse for social support.

These age group differences may be related to the distance which separates mothers from their parents, siblings, and close friends. Older mothers lived an average of 1017 miles (excluding Hong Kong) from their own parents, while younger mothers lived an average of 94 miles from their parents. Inlaws of older mothers lived an average of 790 miles distant, while inlaws of younger mothers lived 279 miles away. Older mothers had no siblings living within an hour of their homes, while six younger mothers did have sisters or brothers nearby. The younger mothers had more frequent contact with a variety of network members, while older mothers relied more exclusively on their spouses for social support.

The ages of their own parents may also have affected the frequency of pre- and postnatal social support for the late-timing mothers. The average age of the older women's mothers and fathers was sixty-eight, while the younger women's mothers averaged a much younger fifty-six, and their fathers followed closely at sixty-and-a-half. With less of a gap between their parents' and their own ages, younger mothers may have sought more emotional, informational, and instrumental help from their parents. Older mothers may have sought or received less help from their parents because

of grandparent age, distance, and the gap in childrearing ideology between generations, as Daniels and Weingarten (1982) also concluded. Older grandparents may have felt less able to provide support, or may have felt less needed.

While the spouse remained the mothers' most frequent source of support from pre- to postnatal periods, support from family members (the spouse, the mothers' parents, inlaws, and siblings) increased, and support from friends, the workplace, and others decreased. Mothers who lived far from family members, such as Suzy, had less frequent support than other mothers. Some mothers who lived far from relatives, Bonnie for example, sensed that they would need support from others in addition to their spouse, and constructed intricate networks of support which carried over from pre- to postnatal periods.

Only three mothers felt that the social support they received postnatally was not adequate for meeting their needs. Jane who returned to work at five weeks postpartum wished that she could have had more help with household chores so that she could spend more time with her baby. Another mother received little empathy from doctors and nurses when she had difficulty with breast-feeding and wanted to switch to a bottle. A third mother wished that her parents lived closer. Most mothers, however, were content with the help they received even when it appeared inadequate to the researcher, as in the case study of Suzy.

Although most mothers were satisfied with the social support they received in the postnatal period, the transition to parenthood was not smooth for all.

The descriptive data have shown that the transition to parenthood was not a very difficult or stressful period for most of the late-timing mothers, although varying degrees of difficulty in maternal adjustment were present among the sample, as seen in the personal profiles. Now we will proceed to a discussion of the variables which were found to be predictive of maternal adjustment for the late-timing mothers.

Predictors of Maternal Adjustment for Late-timing Mothers

The psychological resources of the mother and the temperamental qualities of the infant were the major contributors to the maternal adjustment of the late-timing mothers. The results of the hypotheses show that maternal perception of infant temperament was significantly related to both maternal self-esteem and to the quality of the caregiving environment, while social support was not.

It was surprising to discover that no significant relationships were found between any of the selected social support variables and the maternal adjustment of the late-timing mothers at two months postpartum. Neither spousal support in the household division of labor nor a combination of different types of support from the mothers' postnatal social support network were found to be significantly

related to maternal self-esteem or to the quality of the caregiving environment at two months postpartum.

Spousal support with household chores may be more critical to maternal adjustment if mothers have returned to work. Only one late-timing mother (Jane) had returned to work full-time by two months. She was the only mother who was not satisfied with the division of household labor postnatally, and she also had low feelings of maternal self-confidence. Other mothers implied that they would expect, anticipate, and need their spouses to share more household chores when they did return to work.

No relationship was found between spousal support with household chores and the quality of the caregiving environment although research exists which, in the case of at-risk infants (e.g. Dunst & Trivette, 1986), supports this hypothesis. Dunst and Trivette (1986) found that mothers of at-risk infants were more involved with their children when they had more help with household tasks and childcare chores. Research by Glaser (1987) with mothers of twins found that both instrumental and emotional support were related to differences in maternal adjustment. The late-timing mothers, whose infants were not at-risk, may have been under less stress than the mothers in these studies; their babies may have required less holding and constant care. Instrumental support, alone, may not be as critical as emotional support for mothers whose infants are not at-risk for developmental difficulties.

Some researchers believe it is a combination of different types of support which leads to positive maternal adjustment. Daniels and Weingarten (1982) proposed that meeting a spouse's emotional needs strengthens the mother's resources to respond, nurture, and care for her child, which can be accomplished in part by a more egalitarian participation in household responsibilities, childcare, and nurturing. Crockenberg's (1988) three-way model of social support suggests that emotional, instrumental, and informational support act in concert to enhance maternal self-esteem, parental functioning, and child development. These models help to explain why spousal support in the division of household labor, alone, was not related to maternal self-esteem or to the quality of the caregiving environment for the infant, but they do not explain why a combination of instrumental, informational, and emotional support in the postnatal period was not related to the maternal adjustment of the late-timing mothers.

The results here show that the late-timing mothers had adequate or better maternal self-esteem, but their feelings of maternal self-confidence and the quality of the caregiving environment they provided for their infants were not linked to the presence or absence of a combination of instrumental, informational, and emotional social support which they perceived as helpful in the postnatal period. Helpful social support from families has consistently been related in the literature to positive feelings of maternal

competence and responsive and nurturant parenting for high and low-risk samples (Crockenberg, 1988; Parke & Tinsley, 1987). These results are also at variance with research by Shea and Tronick (1988) who found social support to be related to maternal self-esteem, positive maternal affect, and maternal adjustment in younger first-time mothers (mean age 24.2). The results are in agreement, however, with the results of a study by McGrath (1989) who found that social support did not have a significant association with maternal self-esteem in the neonatal period for a sample of pre- and full-term mothers.

For most late-timing mothers in this study, social support was not a critical contributor to maternal adjustment. The late-timing mothers may have had the personal developmental resources prior to pregnancy to prepare themselves for motherhood; most looked forward to motherhood and felt prepared for the baby. The majority of late-timing mothers may have sought less social support because it wasn't needed. Generalizations about the relationship of social support to maternal adjustment may, therefore, not apply to late-timing mothers. Much of the research about social support and maternal adjustment has been done with younger mothers or with mothers of at-risk infants.

Statistical reasons, on the other hand, may explain why no significant relationship was found between postnatal social support and maternal self-esteem or the quality of

the caregiving environment. Because the spouse was the primary source of support for the late-timing mothers, the variance on this item may not have been great enough to reveal a significant relationship.

Variables other than social support were found to be related to maternal self-esteem and to the quality of the caregiving environment at two months postpartum. We will now proceed to a discussion of those variables.

At two months postpartum, feelings of maternal competence were affected by a combination of infant qualities including difficultness/fussiness, unadaptability, unpredictability, and dullness. Mothers who had low feelings of maternal self-confidence were likely to perceive negative attributes in their infants, as illustrated in the case studies of Suzy and Jane. Difficultness in an infant affected maternal self-confidence more than any other temperamental quality. In research with younger mothers, Shea and Tronick (1988) also found that feelings of maternal self-esteem were affected by infant qualities, including irritability, habituation, and responsiveness.

Late-timing mothers who had positive feelings of maternal self-esteem were also verbally and emotionally responsive to their infants and sensitive to their cues. They were highly involved with their new babies, and provided daily routines which were rich in appropriate stimulation. Mothers who received positive feedback from their infant (responsive, adaptable, but not fussy) became

more confident in their maternal abilities, and more responsive to their infant's needs.

Research about attachment supports the conclusion that infant temperament has much to do with maternal adjustment and the quality of the developing mother-infant relationship. Infant temperament has been found to be related to the development of attachment between mother and infant (Crockenberg & McCluskey, 1986; Belsky, Rovine, & Taylor, 1984; Campos et al, 1983; Kagan, 1982). It is believed to influence the new mother's social responsiveness to her infant (Campos et al, 1983), and to affect the way she assesses her own and her infant's attachment to each other (Campos et al, 1983).

Some researchers (Buss & Plomin, 1984) suggest that a mismatch between maternal temperament and infant temperament or maternal sociability and infant sociability may create irritability for either of them. If so, maternal personality may be partially responsible for maternal perception of negative attributes in the infant. Maternal variables including depression, anxiety, self-esteem, and other measures of parent personality may be correlated with maternal perception of difficultness of infant temperament (Bates, 1987).

This study with primiparous late-timing mothers has confirmed that a significant relationship exists between maternal perception of infant temperament and the quality of the caregiving environment. Infant temperament is related

to the new mother's ability to read her infant's cues which could ultimately alter her ability to respond appropriately to her infant. This research supports Bates' (1987) conclusion that parent perceptions of their infant's temperament will influence how the child is treated and how the environment is altered.

In sum, the infant played a significant role in the maternal adjustment of the late-timing mothers. Most mothers did not find their infants difficult, unadaptable, or dull, but mothers who did perceive negative qualities in their infant, especially difficultness and unpredictability, felt less confident in their maternal abilities and were less sensitive and responsive to their infant's needs, particularly if their baby was fussy. It may be a combination of qualities the mother perceives in her infant as negative, which alter her feelings of maternal competence and lead to less sensitive and responsive interaction between mother and child.

The results of post hoc analyses suggest that prenatal attitudes about motherhood, especially looking forward to motherhood, may have much to do with the maternal adjustment of the late-timing mothers. They may contribute more to maternal feelings of confidence and competence than infant difficultness. They are an indication of the mother's own personal psychological resources available for parenting. Both qualitative and quantitative analyses in this study

link prenatal attitudes about motherhood to the maternal adjustment of the late-timing mothers.

The results of the post hoc analyses should not be overlooked, but they must also be viewed with caution. A more thorough analysis of prenatal attitudes in future research may help us to understand their significance within the larger context of the maternal adjustment of primiparous late-timing mothers.

Summary and Conclusions

The majority of late-timing mothers in this study adjusted well to new motherhood. Most felt confident as mothers, whether or not they received very much help with household work pre- or postnatally, or a combination of instrumental, informational, and emotional support from their spouse and other members of their postnatal social support network. Most late-timing mothers recognized and were supportive of their infant's emotional, cognitive, and social needs, and initiated warm, sensitive, and responsive mother-infant relationships. Those who perceived their infants as difficult were less likely to do so, and were less likely to feel competent as mothers. The majority of late-timing mothers, however, perceived their infants as adaptable, interesting, somewhat unpredictable, but not unusually difficult or fussy.

The infants of the late-timing mothers were healthy babies and their deliveries were without complication for

the most part. As a group they were not perceived as unusually difficult. The sociability which the mothers recognized in their infants and the reciprocity of communication between the two may have provided feedback to reinforce or develop positive feelings of maternal self-esteem.

Infants provide feedback and support to new mothers through their adaptability, predictability, sociability, and fussiness. In this study, mothers who perceived negative attributes in their infants were more likely to have negative feelings of maternal self-esteem. It may be a combination of qualities which the mother perceives in her infant as negative (especially difficultness) which alter her feelings of competence as a mother and lead to less optimal interaction between mother and infant.

Most late-timing mothers were satisfied with the support they received pre- and postnatally. Younger mothers received helpful support from their prenatal social support network significantly more often than older mothers, while older mothers received significantly more frequent and helpful support from their spouse during the postnatal period. Because the spouse was the mothers' primary source of support in the postnatal period, the variance may not have been great enough to reveal a significant relationship between social support and maternal adjustment during the postnatal period.

The quantitative results suggest that social support played a much less critical role in the maternal adjustment of the late-timing mothers than the mother's own personal psychological resources or the infant. Qualitative results, on the other hand, suggest that the availability of appropriate social support contributed to maternal adjustment when mothers had apprehensive prenatal attitudes about motherhood and an infant perceived as difficult and demanding. It must be recalled that the mothers selected for personal profiles had unique styles of maternal adaptation, quite unlike the rest of the sample. It is likely, however, that generalizations about the contribution of social support to maternal adjustment from studies with much younger women may not apply to the majority of late-timing mothers in this sample at two months postpartum.

In sum, the late-timing mothers were an optimal group in terms of individual development and personal readiness for motherhood. Most had achieved personal and work-related goals, and looked forward to becoming mothers. Most felt confident in their new role as mother. Social support in the postnatal period was not necessary for the development of maternal self-esteem for most mothers. Positive prenatal attitudes about motherhood, adequate or better maternal self-esteem, and positive perceptions of their infants led to the beginning of a sensitive, responsive, and supportive relationship between mother and child.

The maternal adjustment of the late-timing mothers did not vary significantly by age, but was affected by different systems at different times. Post hoc analyses revealed that attitudes about motherhood may have played a significant role in the maternal adjustment of the late-timing mothers in the prenatal period. The temperament of the infant, the quality of the caregiving environment, and maternal self-esteem all contributed to the maternal adjustment of the late-timing mothers in the postnatal period. It was the infant and the mother who were the primary players in this process.

Figure 1 shows a data-based model of the constellation of variables which have been found to be significantly related to the maternal adjustment of the first-time late-timing mothers at two months postpartum.

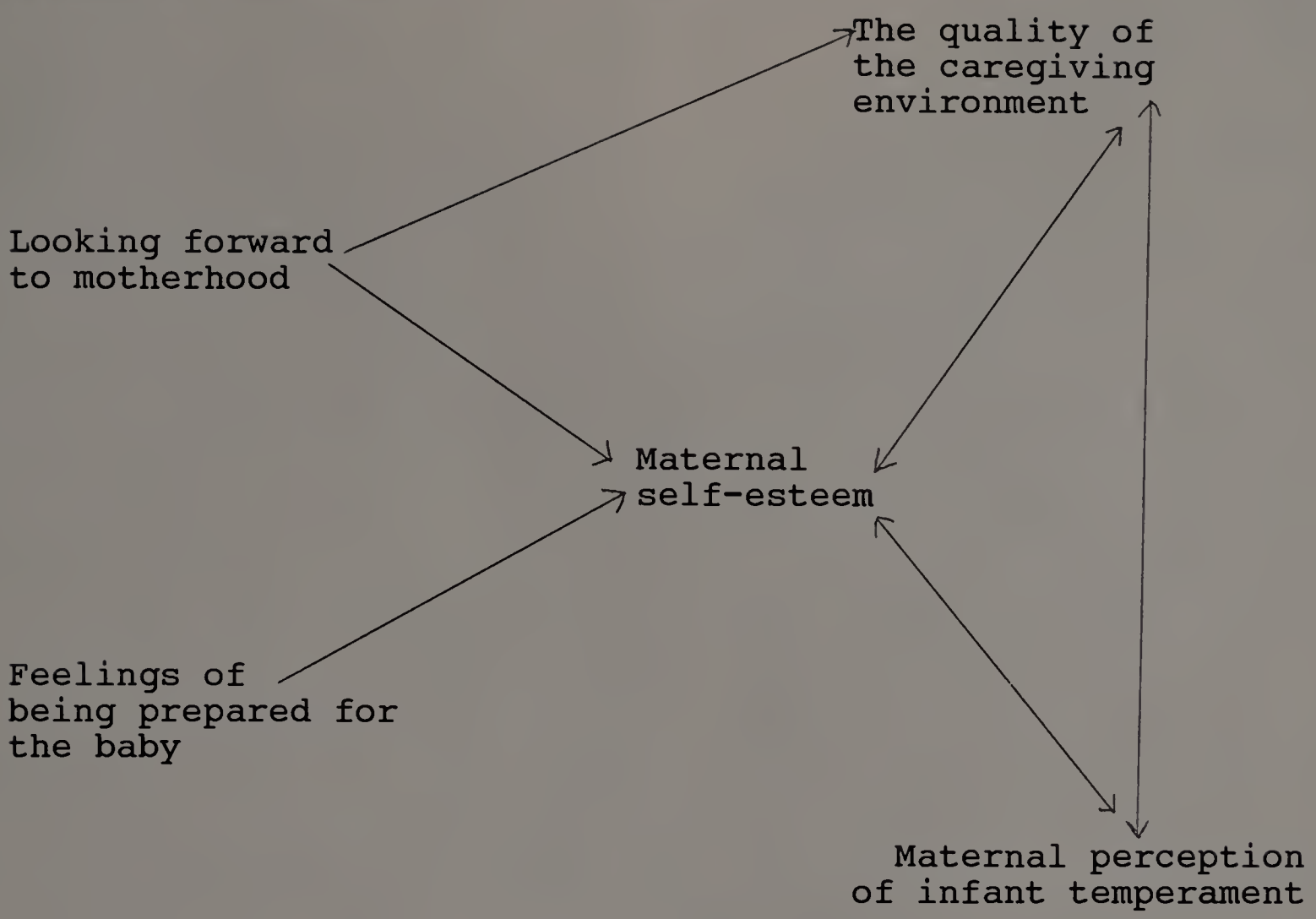

Figure 1. The constellation of variables significantly related to the maternal adjustment of the late-timing mothers at two months postpartum.

In conclusion, maternal adjustment proceeded smoothly for most of the late-timing mothers and their infants, although there were varying degrees of difficulty as illustrated in the personal profiles. Both the personal psychological resources (prenatal attitudes about motherhood and maternal self-esteem) of the mother and the behavior of the infant (infant temperament) made significant contributions to the maternal adjustment of the first-time late-timing mothers.

Limitations of the Research

The size and composition of the sample are limited due to the low incidence of the target population in the United States and within the boundaries set for this study. Late-timing childbearers are a small percentage of the total population of parents.

This sample is not representative of the population of late-timing mothers throughout the United States. The sample was selected from a population of late-timing parents living in rural northern New England. An overwhelming majority of the late-timing women who lived within a sixty mile radius of the researcher and who were expecting first babies coincident with the time limits of this study agreed to participate.

Several of the instruments used in this study were self-report instruments. Although great efforts were taken in the development of the instruments to eliminate any such effect, results of any self-report measure risk the effect of social desirability of response.

Implications of the Research

Implications for Parenting

Initiating parenthood between the ages of twenty-nine and thirty-nine is more common than it has been in the past. Becoming a mother at a later age was not viewed as an unusual phenomenon by the women in this sample, by their friends, or by their peers in the workplace, as suggested by the sociological perspective. Although many of the mothers felt that beginning a family at a slightly younger age would be less constraining for family planning, most mothers felt that, as a result of their maturity and experiences, they were better mothers at their present age than they could have been in their early twenties. Most mothers concurred that age thirty would be a good age to initiate parenthood.

In the past, researchers have questioned the adaptability of the older first-time mother to unexpected, uncontrollable events of parenthood (Mercer, 1986; Entwisle & Doering, 1982) and her ability to shift from personal gratification to a concern for the well-being of her children (Rossi, 1987). The quantitative data show that the late-timing mothers adapted well, for the most part, to their new role. The qualitative data show that maternal adaptability varied among the sample. Some had more difficulty than others, but most were able to shift from an orientation of personal gratification to a concern for the needs of their infant. Most mothers provided a sensitive,

responsive, and stimulating home environment for their infants.

Although the late-timing mothers perceived their infants as more unpredictable than younger first-time and multiparous mothers, observations of mother-infant interaction and mother report show a high level of infant sociability, infant adaptability, and appropriate interaction between mother and infant. In fact, the older the mother in this study the more likely she was to perceive her infant as adaptable.

Implications for the Community

This study suggests that older mothers have different needs for support than younger mothers. Although all mothers in this study were late-timing, differences among age groups show that the older the mother the less support she received from a variety of support figures and the more she relied on her spouse. The older the mother, the greater was her need for emotional support and informational support, but the less she needed instrumental support. Implications of these findings suggest that when parents or husbands are not available for support that is needed, late-timing mothers need other sources of support on whom to rely, particularly if their infants are difficult or if their maternal self-esteem is uncharacteristically low.

New mother support groups in the hospitals were not well-attended by the late-timing mothers, although those who

did attend found encouragement amongst other mothers who were sharing the first-birth experience at a later age. One family services agency provided a volunteer adult mother's helper upon request. This is a particularly good idea for late-timing mothers whose close friends and family are likely to live far away.

Mothers in this study relied mostly on community structures such as the pregnancy resource center of local hospitals, books, and their obstetricians or midwives to provide information about childbirth and parenting. The medical centers recognized that differences in maternal age meant a need for differentiation of services. Childbirth classes were often organized by maternal age. The magnet hospitals in this rural area were aware of the concerns and needs of the late-timing population of new parents, and they were striving toward meeting the needs of the diversified group they were serving.

The continued trend for women to delay parenting until their thirties or forties calls for hospitals and communities to continue to search for appropriate ways of providing emotional and informational support to new and expectant mothers. The status-quo may not be helpful for women whose work-related responsibilities preclude attending childbirth classes, who feel uncomfortable in support groups, or who live in remote rural areas. Providing a home-based service such as an adult mother's helper may be an appropriate solution.

This study also indicates that in this area of rural New England, there is a shortage of affordable quality childcare for young infants and a desire for a longer paid maternity leave. The lack of on-site childcare, year-long waiting lists for popular day care centers, and the lack of available and affordable daycare for infants at eight weeks left some mothers with little choice but to quit their jobs. Some who returned to work before eight weeks regretted the time away from their infants. Communities and the workplace need to work together to provide affordable quality childcare and more flexible work hours. Attention to these needs may make a substantial difference for mothers who are at-risk for a difficult adjustment to motherhood.

Implications for Society

Late-timing parenthood is a trend which has not abated since the 1970's. Delayed parenthood was a common, almost expected life-course pattern for middle-class women living in the rural New England communities of this investigation. The late-timing mothers expected to complete a college or post-graduate education, work for a number of years to reach a high level of responsibility in the workplace, marry, and wait until they felt ready before having a baby.

Interviews with the mothers indicated that societal expectations of parents in the workplace need to change. The workplace must recognize that mothers and fathers who are active in their profession are also invested in their

families. Parental leave proposals which exclude anyone from participation are of little help to parents who wish to spend more time with their new babies and yet return to their former positions of responsibility in the workplace. An equitable plan which promotes family development for all new parents will ultimately be more productive for business and society.

Implications for Future Research

This study indicates that conclusions of studies about maternal adjustment conducted with mothers of traditional first-birth age may not apply to mothers who have waited until age twenty-nine or later to initiate parenthood. Social support, for instance, appears to have been less influential in the maternal adjustment of the late-timing mothers than for samples of much younger women. When one late-timing mother was asked, "Did you receive the support you needed most?", she replied, "Mostly from her (the baby) and her reactions and feedback" (Postnatal S.S.N.Q., participant #2).

This study suggests that further exploration of the role of infant temperament in the maternal adjustment of the late-timing mothers is needed including the match of mother-infant temperamental styles and mother-infant interaction. The infant has proven to be a powerful contributor to the maternal adjustment of the late-timing mothers in this study.

The qualitative data indicate a need for more in-depth research about social support and the maternal adjustment of late-timing mothers. Future research about the maternal adjustment of late-timing mothers should continue to assess relationships between prenatal attitudes, social support, infant temperament, maternal self-esteem, and mother-infant interaction from the prenatal period through the first year of parenthood, as developmental changes occur in the family. Social support may prove to be necessary at more stressful times including the mother's return to work, toddlerhood, and the birth of a second child. When the newness of the infant departs, and the permanence of parenthood becomes established, new adaptations will need to be made and assessed.

This study suggests that The Home Observation for Measurement of the Environment may be limited in its ability to capture the essence of maternal support for infants who are as young as two months. It may be less appropriate for use with mothers of young infants than with mothers of older infants and toddlers. In some cases, as recommended by the authors, researcher interpretation of developmental appropriateness of items in the Inventory was necessary. A methodological study aimed at the design an instrument more sensitive to the developmental needs of young infants would address this question.

Qualitative and quantitative research methods complemented one another in this study. The quantitative

methods provided the framework for the research, and addressed research questions about the adaptability of the older mother to unpredictable events of new motherhood. The qualitative data provided rich detail which demonstrated the diversity of the sample. The quantitative methods were used to draw conclusions about the maternal adjustment of the group as a whole, while the qualitative methods examined individual experiences to derive meaning and a greater understanding of how diverse the experience of becoming a mother can be in what appeared to be a fairly homogeneous sample. A combination of qualitative and quantitative methods can provide a wealth of data for research from a developmental perspective.

The personal profiles are a vivid expression of the uniqueness of maternal adjustment of mothers within a late-timing sample. The profiles showed that a range of styles of adaptability existed within a sample of twenty late-timing mothers; the process of maternal adjustment was not the same for all. The profiles demonstrated that maternal adjustment is not a static but a continually changing process affected by multiple systems surrounding the new mother.

The personal profiles also demonstrate that qualitative results do not always validate quantitative results. Qualitative research can show the variability which quantitative means cannot. The profiles have validated the

need for further in-depth study of the maternal adjustment of late-timing mothers over an extended period of time.

The conclusions of this study demonstrate that the developmental perspective is the most appropriate and comprehensive perspective to guide research about the maternal adjustment of late-timing mothers, although all perspectives about the transition to parenthood have contributed to this study. The conclusions which follow demonstrate in what ways the results of this study support different theoretical perspectives about the transition to parenthood.

Conclusions. Initiating parenthood at a later age may be an adaptation women are making to a changing economic and cultural climate. While in their twenties, most of the late-timing mothers continued their education and became invested in careers. Two incomes became mandatory for most. Parenting was no longer viewed as a primary life-course goal of the early or mid-twenties. For most mothers, completing their education, meeting career goals, and satisfying individual personal and social needs preceded thoughts of becoming a parent. Among the friends and peers of this diverse middle-class sample, it was no longer considered unusual or inappropriate to initiate parenthood at age twenty-nine or older; often it was considered the norm.

The results of this study demonstrate that the transition to parenthood is a normal developmental transition which can vary by context and timing. It was not

a difficult role transition or a developmental crisis which involved conflict resolution for most of the late-timing mothers. It was a developmental process which began before the prenatal period and continued through the early postnatal period, that was affected by multiple systems along the way. Among the sample of late-timing mothers there was a range in variability of styles of adaptation, accompanied by differing degrees of difficulty.

The mother and the infant were the systems most influential in the maternal adjustment of the late-timing mothers during the transition to parenthood. The infant was not a passive participant in this process. She was a very active influence in the maternal adjustment of her late-timing mother. The infant provided feedback to her mother, through her temperament and interactions, to correct or restructure her mother's expectations.

At two months postpartum most late-timing mothers were not concerned with poor self-esteem and neglected interests. Most mothers planned to return to work by four months postpartum. Interest in their infants superseded career goals for some. Most mothers felt confident and competent that they would be attentive and loving mothers.

Although kin were not always available for emotional and instrumental support, the spouse provided most of the support which mothers needed. Social support, however, was not as influential in the maternal adjustment of the late-timing mothers as most perspectives suggest. Older mothers

may have different needs for support than much younger mothers due to their own personal psychological resources.

The results of this study show that the timing of parenthood does make a difference in the management of the parental role. A majority of the late-timing mothers were more self-confident as mothers and provided a qualitatively different and more supportive home environment for their infants than younger mothers. They found their infants significantly more sociable and unpredictable than younger mothers, but no more difficult or unadaptable. Although there were differences in maternal adjustment between the late-timing mothers and much younger samples, there was no significant difference in the maternal adjustment of younger and older late-timing mothers in this sample.

This study has shown that there is potential for change during the transition to parenthood. The period of maternal adjustment was not static, but dynamic when viewed over time. The personal profile of Bonnie provides an illustrative example.

While the process was not always the same, most of the late-timing mothers adjusted well to new motherhood by two months postpartum. The personal psychological resources of the mother, the qualities of the infant, and for some, sources of support and stress, affected maternal adjustment and contributed to parental functioning during the transition to parenthood.

APPENDICES

APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

1. Your name: _____Ethnic backgd._____Religion_____
2. Your age at anticipated time of birth: ___
3. Anticipated due date: _____
4. Your husband's age:___ Ethnic backgd._____Religion_____
5. Is this your first baby? _____
   If not, please explain: _____
_____
_____
_____
6. Is this your first marriage? _____
7. Is this your husband's first marriage? _____
8. Is this your husband's first child? _____
   If not, please explain: _____
_____
_____
9. How many years have you and your husband co-resided?____
10. Was this pregnancy planned? _____
11. Was this pregnancy desired by both parents? _____
    If not, please explain. _____
_____
_____
12. Please indicate the educational level you and your husband have attained, with an M for mother or F for father.
    a. high school diploma ___
    b. one year of college or more, but not a bachelors degree ___
    c. bachelors degree ___
    d. post graduate work:___ Please specify:_____
    e. other _____
13. How many years were you employed prior to pregnancy? ___
14. What is/was your position?_____
15. Most of the time did you work:
    a. part-time? ___
    b. full-time (30 hours or more)? ___
16. What was your and your husband's most recent approximate annual income? Please indicate with an M and an F.
    a. below $20,000? ___
    b. between $20,000 and $40,000? ___
    c. over $40,000? ___
17. Do you plan to return to work? ___
    Are you: a. very sure ___
             b. somewhat sure___
             c. not so sure___
18. If you return to work, when will that be? ___ months ___ years
19. Will you work part-time? ___ Full time? ___

20. Will you return to the same position or to one of equal pay and responsibility? _____
21. Are you taking a parental leave? ___
22. Is it a paid leave? ___
23. Is your husband taking a leave of absence from work?___
24. Do you have any unusual medical conditions? ___
    If so, please describe:_____
_____
25. Has this pregnancy been "normal" as far as you know?____
    If not, why not? _____
_____
26. Did you try for more than three years to get pregnant?__
27. Did you take fertility drugs? ___
28. Are you expecting more than one baby? ____
29. Did you have amniocentesis?___ Chorionic villi sample?__
30. Do you expect your baby to be healthy? ____
31. How old were your parents at the time when your mother first gave birth? Mother ___ Father ___
32. Are your parents still living? _____
    If so, how old are they now? Mother ___ Father ___
33. How far away from you do your parents live? _____
34. How often do you see them?_____
35. How far away from you do your in-laws live? _____
36. How often do you see them?_____
37. When you were a child, your mother was primarily:
    a. a homemaker ___ c. employed full-time ___
    b. employed part-time ___
38. Do you have siblings?___ What are their ages now?
_____
39. Have you had much experience in caring for infants?
    a. a lot ___ b. some____ c. not much ___ d. none___
40. Has your husband had experience in caring for infants?
    a. a lot ___ b. some____ c. not much____ d. none ____
41. How does your husband plan to participate in childcare?_____
_____
42. How have you both prepared for the birth experience?
_____
_____
43. How have you both prepared for being a parent?
_____
_____
_____
_____
44. After the baby is born, what percentage of the household labor do you think you will do?___% Your husband?___%

APPENDIX B

PRENATAL INTERVIEW

1. Please tell me a little about yourself, where you grew up, about your family, about your early adult years.

2. What is your relationship like with your own parents? Your in-laws?

3. Do you have any issues to resolve with your parents?

4. How supportive have they been during your pregnancy?
   1. not very supportive 2. somewhat supportive
   3. supportive 4. very supportive
   5. extremely supportive

5. Do you want to be a mother like your own mother?

6. Do you identify more with your mother or your father?

7. How do you feel about your relationship with your husband?

8. How well do you communicate with each other?
   1. not well 2. somewhat well 3. well
   4. very well 5. extremely well

9. How ready are you as a couple to become parents?
   1. not ready 2. somewhat ready 3. ready
   4. very ready 5. more than ready

10. How do you and your husband take care of home responsibilities?
   1. I do most of the work. 2. He helps a bit.
   3. He's a big help. 4. We share equally
   5. He does more than I do.

11. How do you think you will share this responsibility after the baby comes?

12. How do you and your husband plan to share infant care?

13. How have your friends responded to your pregnancy?

14. How have your friends helped you?

15. Do you have any same age friends who are expecting?

16. How has the workplace responded to your pregnancy?

17. On a scale of 1 to 5, has the workplace reaction been
    1. very negative? 2. somewhat negative?
    3. not much different? 4. very positive?
    5. extremely positive?

18. What policies or benefits does your workplace have related to parenting?

19. On a scale of 1 to 5 how adequate are these policies in meeting your needs?
    1. terribly inadequate 2. somewhat inadequate
    3. adequate 4. very adequate 5. more than I need

20. How does the community in which you live support new or prospective parents?

21. On a scale of 1 to 5, are these measures adequate in meeting your needs?
    1. extremely inadequate 2. not very adequate
    3. somewhat adequate 4. adequate
    5. very adequate

22. How did you react or feel when you first discovered you were pregnant? How did your husband react?

23. How are you experiencing pregnancy? (physically, emotionally, socially)

24. Did you have amniocentesis? What were your thoughts and feelings during your first trimester? Second? Third? Before amnio? After amnio?

25. Can you tell me your reasons for not having a baby before now?

26. Do you feel you are now ready to be a parent? Are there any issues you have not yet resolved regarding yourself? (Life course agenda: goals for self)

27. On a scale of 1 to 5, how ready do you feel you are to become a parent?
    1. not ready at all 2. somewhat ready 3. ready
    4. very ready 5. more than ready

28. How do you feel about becoming a mother?

29. On a scale of 1 to 5 would you say you feel
    1. You are not looking forward to becoming a mother.
    2. You are somewhat " " " " " " .
    3. You are looking forward to becoming a mother.
    4. You are really looking forward to becoming a mother
    5. You are extremely excited about being a mother.

30. How important are schedules to you? Predictability? Completing tasks? Planning ahead? Being prepared?

31. What are you most concerned about for the future, after the baby arrives? What are your anxieties, worries?

32. How have you prepared for the baby?

33. How prepared do you feel for the baby?
    1. not prepared at all
    2. somewhat prepared
    3. prepared enough
    4. very well prepared
    5. too prepared

34. Will anyone help you when you come home from the hospital?

35. Will you be returning to work after the baby is born? How do you feel about that?

36. What plans do you have for childcare?

37. How do you expect your life to change after the baby is born?

38. Do you expect your life to change:
    1. not much?
    2. a little?
    3. somewhat?
    4. a lot?
    5. completely?

39. How do you wish labor and delivery to be?

40. How do you plan to feed the baby?

41. What do you anticipate doing with your baby?

42. Have you noticed that certain people have opinions about childbirth and pregnancy at this age in the life course?

43. What kinds of things have people said?

44. Do you think women experience pregnancy differently at 22 from ____? At 30 from ____? At 40 from ____?

This is the end of our interview. Are there any questions you thought I would ask that I didn't? Do you have any related thoughts or issues you would like to share?

APPENDIX C
POSTNATAL INTERVIEW

1. Can you tell me about labor and delivery? (When you went to the hospital, who was with you, how it went?)

2. How did you feel when the baby was born?

3. What was your first impression of the baby?

4. What was your stay in the hospital like? How long were you there? Did anybody help you?

5. Did you meet any other mothers while in the hospital whom you've kept in touch with?

6. How were your first days at home?

7. Was anyone at home to help you with your baby or the housework? Who? How did they help?

8. Who has been your greatest support during the early weeks of motherhood? What did he/she do?

   8a. What has your husband done to help you?

   8b. Has the help you have received been adequate?

9. Do you know of any activities available to new mothers in your community? Have you attended any of them?

10. Have you seen your friends very often? What do you do with them?

    10a. How have your friends helped you?

11. Are you working (outside of the home) now? If so, how often? What is that like for you? Are you enjoying your work or wishing you didn't have to go?

12. When you are at work, who cares for ____? How is that working out?

13. (If not working)... Are you still planning to return to work as you had planned?
How do you feel about that?

14. Has your employer been flexible about your return to work and about your work schedule? What has she/he done for you?

15. If you could plan an employer policy for new first-time mothers, what would it include?

16. Has your husband's work schedule changed at all since the baby was born?

17. Has anything changed about the way you and your husband share the workload at home? Are you satisfied with the division of household responsibilities?

18. How do you and your husband share childcare?

19. Do you have time to do the things you used to like to do, alone, with friends, or with your husband?

Now I'd like to ask you some questions about your baby.

20. How are things going now with the baby? Have you found any routines that work for you? What are they?

21. What has been the most difficult thing to learn about your baby? The easiest?

22. Has the baby had or does the baby have colic? How do you comfort her/him?

23. How has the baby's health been?

24. How would you describe your baby to someone who has never seen him/her?

Now let's talk a little bit about what new motherhood is like for you.

25. Do you feel like a mother? Why or why not?

26. Do you enjoy being a mother? What do you like to do with your baby?

27. What has been the most difficult part of being a mother?

28. What would you say you do most confidently as a mother?

29. What are you least confident about as a mother?

30. Do you worry about your baby?

31. Is the experience of being a mother the same as you imagined it would be? What's the same? What is different?

32. Do you feel you've changed a lot since you had your baby? How have you changed?

33. Have your feelings about yourself changed?
Has your relationship with your spouse changed?
" " " " your parents and friends changed? (Do others look at you differently?)
Have your interests changed?
Have your goals changed?

34. How do you feel about these changes?

35. How do you balance the needs of the infant, with your own individual needs, and the needs of your marriage?

Now I'd just like to ask a few questions about becoming a mother at this time in your life.

36. How has becoming a mother at your present age fit in with your life plans and goals?

37. Do you feel it is common or uncommon to be a mother for the first time at your age?

38. Why do you think there are so many women deciding to wait until their thirties or early forties to have their first child?

39. Do you think this trend will continue? Why/why not?

40. Why did you choose to have a child now? Did you feel any pressure from others to become a mother?

41. As with any decision in life, there are both positive and negative aspects of giving birth to a first baby at your age. Can you tell me what you think the positive aspects are? The negative aspects?

42. Are there certain qualities you think women at your age bring to motherhood, which much younger women may not?

43. If a teenage girl asked you what is the best age for having a first baby, what would you tell her?

APPENDIX D

SOCIAL SUPPORT NETWORK QUESTIONNAIRE
(PRE- AND POSTNATAL)
(Crockenberg, 1981)

I would now like to ask you about some of the other people in your life. Since you became pregnant or have had your baby, can you tell me which people, among those you know, your family, friends, neighbors, peers, have been most helpful to you? How they have helped? Please * who was the most helpful.

Relationship	What did they do? (Write on back too.)	How often? (see code)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Code for how often you received helpful support during the last month:

1. Often every day
2. Once a day
3. 2-3 times a week
4. Once a week
5. Once in 2 weeks
6. Once in 3 weeks
7. Not at all

The following section was added for the Postnatal Social Support Network Questionnaire:

1. What type of support did you need the most?

2. Did you receive the support you needed the most?

3. Was the support you received helpful?

Code for helpfulness of support: Circle one for the entire network and record above for each source of support.

1. not helpful at all
2. somewhat helpful
3. helpful
4. very helpful
5. extremely helpful

APPENDIX E

DIVISION OF HOUSEHOLD LABOR QUESTIONNAIRE
(PRE- AND POSTNATAL)
(adapted from Welles, 1982)

How many minutes or hours do each of you spend performing the following household responsibilities each week?

Type of Housework	Time Spent Doing Chore Each Week: Man	Woman	NA	Comments
1. Wash dishes.....				
2. Clean.....				
3. Grocery shop.....				
4. Prepare food.....				
5. Wash clothes.....				
6. Pay bills.....				

Comments:

APPENDIX F

CHILDCARE ROUTINES QUESTIONNAIRE
(adapted from Welles, 1982)

How are childcare tasks shared in your family? Please indicate approximately how much time each of you spends per day engaged in the following activities with your baby.

Childcare Routine	Minutes Per Day Man	Woman	NA
1. Bathe.....			
2. Play.....			
3. Put to bed evenings.....			
4. Change wet diapers.....			
5. Change dirty diapers.....			
6. Burp.....			
7. Pick up baby when cries...			
8. Dress in mornings.....			
9. Put on pajamas in evening.			
10. Sing to baby.....			
11. Read to baby.....			

Comments:

APPENDIX G

MATERNAL SELF-REPORT INVENTORY (SHORT FORM)

(Shea & Tronick, 1988)

Please note how accurately the following statements describe how you feel. Read each item carefully and when you are sure you understand it, indicate your answer by drawing a circle around the answer which best expressed the degree to which the statement is true for you.

Rate each statement as follows:

CF	MF	Un	MT	CT
Completely False	Mainly False	Uncertain or Neither True Nor False	Mainly True	Completely True

For example, circle CF if you feel that statement is completely false, circle MF is the statement is mainly false, circle MT if the statement is mainly true, and circle CT if the statement is completely true. If you are uncertain or feel that the statement is neither true nor false, then circle Un.

Please answer each item as honestly as you can, and work rapidly as first impressions are as good as any. Try to answer every question, and if in doubt, circle the answer which comes closest to expressing your feelings. Although some of the statements seem to be similar, they are not identical, and should be rated separately. All of your answers will be treated with complete confidentiality. There are no right or wrong answers, so please answer according to your own feelings. If you have any questions or comments to make, please feel free to note them at the end of the questionnaire. Your comments are very much appreciated.

Thank you very much.

CF	MF	Un	MT	CT
Completely False	Mainly False	Uncertain or Neither True Nor False	Mainly True	Completely True

1. I found the experience of labor and delivery to be one of the most unpleasant experiences I've ever had. CF MF Un MT CT

2. I think that I will be a good mother. CF MF Un MT CT

3. I am confident that I will have a close relationship with my baby. CF MF Un MT CT

4. I don't have much confidence in my ability to help my baby learn new things. CF MF Un MT CT

5. Looking forward to having a baby gave me more pleasure than actually having one. CF MF Un MT CT

6. I have real doubts about whether my baby will develop normally. CF MF Un MT CT

7. I found the delivery experience to be very frightening and unpleasant. CF MF Un MT CT

8. I often worry that I may be forgetful and cause something bad to happen to my baby. CF MF Un MT CT

9. I am confident that I will be able to work out any normal problems I might have with my baby. CF MF Un MT CT

10. I am concerned that I will have trouble figuring out what my baby needs. CF MF Un MT CT

11. I worry about whether my baby will like me. CF MF Un MT CT

12. I expect that I won't mind staying at home to care for my new baby. CF MF Un MT CT

CF	MF	Un	MT	CT
Completely False	Mainly False	Uncertain or Neither True Nor False	Mainly True	Completely True

13. I found the delivery experience to be very exciting. CF MF Un MT CT

14. I am concerned about whether my baby will develop normally. CF MF Un MT CT

15. I doubt that my baby could love me the way I am. CF MF Un MT CT

16. It really makes me feel depressed to think about all there is to do if my baby gets sick. CF MF Un MT CT

17. I worry that I will not know what to do if my baby gets sick. CF MF Un MT CT

18. It is difficult for me to know what my baby wants. CF MF Un MT CT

19. I found the whole experience of labor and delivery to be one of the best experiences of my life. CF MF Un MT CT

20. I am afraid I will be awkward and clumsy when handling my baby. CF MF Un MT CT

21. I feel confident about being able to teach my baby new things. CF MF Un MT CT

22. I am confident my baby will be strong and healthy. CF MF Un MT CT

23. I feel that I will do a good job taking care of my baby. CF MF Un MT CT

24. I know enough to be able to teach my baby many things which he/she will have to learn. CF MF Un MT CT

25. I worry about being able to fulfill my baby's emotional needs. CF MF Un MT CT

26. I am confident that my baby will love me very much. CF MF Un MT CT

Is there anything you'd like to add?_____

APPENDIX H

INFANT CHARACTERISTICS QUESTIONNAIRE
(Bates et al, 1979)

Directions: For the following questions, please circle the number that is most typical of your baby. "About average" means how you think the typical baby would be scored. Even if you're not sure how a "typical" baby would be scored, answer based on your own thoughts and feelings. If the question does not apply to your baby, mark it "NA".

Listed below are a few sample questions from each factor:

<u>ICQ I: Fussy, Difficult</u>

1. How easy or difficult is it for you to calm or soothe your baby when he/she is upset?

1	2	3	4	5	6	7
very easy			about average			difficult

2. How many times per day, on the average, does your baby get fussy and irritable--for either short or long periods of time?

1	2	3	4	5	6	7
never	1-2 times per day	3-4 times per day	5-6 times per day	7-9 times per day	10-14 times per day	more than 15 per day

3. How much does your baby cry and fuss in general?

1	2	3	4	5	6	7
very little: much less than the average baby			average amount: about as much as the average baby			a lot: much more than the average baby

<u>ICQ II: Unadaptable</u>

1. How does your baby typically respond to a new person?

1	2	3	4	5	6	7
almost always responds favorably			responds favorably about half the time		almost always responds negatively at first	

2. How does your baby typically respond to being in a new place?

1	2	3	4	5	6	7
almost always responds favorably			responds favorably about half the time		almost always responds negatively at first	

3. How does your baby respond to disruptions and changes in the everyday routine, such as when you go to church or a meeting, on trips, etc.?

1	2	3	4	5	6	7
very favorably doesn't get upset			about average		very unfavorably gets quite upset	

ICQ III: Dull

1. How active is your baby in general?

1	2	3	4	5	6	7
very calm and quiet			average		very active and vigorous	

2. How much does your baby smile and make happy sounds?

1	2	3	4	5	6	7
a great deal: much more than most infants			an average amount		very little: much less than most infants	

3. How excited does your baby become when people play with or talk to him/her?

1	2	3	4	5	6	7
very excited			about average		not at all	

ICQ IV: Unpredictable

1. How easy or difficult is it for you to predict when your baby will go to sleep and wake up?

1	2	3	4	5	6	7
very easy			about average			difficult

2. How easy or difficult is it for you to predict when your baby will become hungry?

1	2	3	4	5	6	7
very easy			about average			difficult

3. How easy or difficult is it for you to know what's bothering your baby when he/she cries or fusses?

1	2	3	4	5	6	7
very easy			about average			difficult

APPENDIX I

HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT

(Caldwell & Bradley, 1978)

I. Emotional and Verbal Responsivity of Mother	yes/no
1. Mother spontaneously vocalizes to child at least twice during visit (excluding scolding).	_____
2. Mother responds to child's vocalizations with a verbal response.	_____
3. Mother tells child name of an object during visit or says name of person or object in a "teaching style".	_____
4. Mother's speech is distinct, clear, and audible.	_____
5. Mother initiates verbal interchanges with observer--asks questions, makes spontaneous comments.	_____
6. Mother expresses ideas freely and easily and uses statements of appropriate length for conversations (gives more than brief answers).	_____
7. Mother permits child occasionally to engage in messy types of play.	_____
8. Mother spontaneously praises the child's qualities or behavior twice during visit.	_____
9. When speaking of or to child mother's voice conveys positive feeling.	_____
10. Mother caresses or kisses child at least once during visit.	_____
11. Mother shows some positive emotional responses to praise of child offered by visitor.	_____
Subscale Total (no. of yes answers)	_____

II. Avoidance of Restriction and Punishment	yes/no
12. Mother does not shout at child during visit.	_____
13. Mother does not express overt annoyance with or hostility toward child.	_____
14. Mother neither slaps nor spanks the child during visit.	_____
15. Mother reports that no more than one instance of physical punishment occurred during past week.	_____
16. Mother does not scold or derogate child. during visit.	_____
17. Mother does not interfere with child's actions or restrict movements more than 3 times.	_____
18. At least 10 books are present and visible.	_____
19. Family has a pet.	_____
Subscale Total (no. of yes answers)	____

III. Organization of the Environment	yes/no
20. When mother is away, care is provided by one of three regular substitutes.	_____
21. Someone takes child into grocery store at least once a week.	_____
22. Child gets out of house at least four times a week.	_____
23. Child is taken regularly to doctor's office or clinic.	_____
24. Child has a special place in which to keep his toys or treasures.	_____
25. Child's play environment appears safe and free of hazards.	_____
Subscale Total (no. of yes answers)	_____

IV. Provision of Appropriate Play Material	yes/no
26. Child has some muscle activity toys or materials.	_____
27. Child has a push or pull toy.	_____
28. Child has stroller or walker, kiddie car, or scooter, or tricycle.	_____
29. Mother provides toys or interesting activities for child during interview.	_____
30. Provides learning equipment appropriate to age--cuddly toy or role-playing toys.	_____
31. Provides learning equipment appropriate to age--mobile, table and chairs, high chair, play pen.	_____
32. Provides eye-hand coordination toys, items to go in and or receptacle. Fit together toys.	_____
33. Provides eye-hand coordination toys that permit combinations-stacking, nesting, blocks, building toys.	_____
34. Provides toys for literature and music.	_____
Subscale Total: (no. of yes answers)	_____

V. Maternal Involvement With Infant	yes/no
35. Mother tends to keep child within visual range and to look at him often.	_____
36. Mother talks to child while doing work.	_____
37. Mother consciously encourages developmental advance.	_____
38. Mother invests "maturing toys" with value via her attention.	_____
39. Mother structures child's play periods.	_____
40. Mother provides toys that challenge child to develop new skills.	_____
Subscale Total: (no. of yes answers)	_____

VI. Opportunities For Variety In Daily Stimulation	yes/no
41. Father provides some caretaking every day.	_____
42. Mother reads stories at least 3x a week.	_____
43. Child eats at least one meal per day with mother and father.	_____
44. Family visits or receives visits from relatives.	_____
45. Child has three or more books of his own.	_____
Subscale Total: (no. of yes answers)	_____

Totals For Each Category	yes
I. Emotional and Verbal Responsivity of Mother	_____
II. Avoidance of Restriction and Punishment	_____
III. Organization of the Environment	_____
IV. Provision of Appropriate Play Material	_____
V. Maternal Involvement With Child	_____
VI. Opportunities for Variety in Daily Stimulation	_____
Total Score (# of yes answers)	_____

APPENDIX J

QUANTITATIVE SCORES OF TWO WOMEN OF THE PERSONAL PROFILES

Table 35. Bridgette and Suzy's Quantitative Scores Compared to Means of the Late-timing Sample

Maternal Variables	Bridgette's Scores	Suzy's Scores	Sample Means	S.D.
Prenatal Interview Question #29 (looking forward to motherhood)	5.00	2.00	4.15	.83
Prenatal Interview Question #33 (feeling prepared for the baby)	4.00	2.00	3.45	.89
MSI (maternal self-esteem)	125.00	66.00	108.50	16.32
HOME Total (the quality of the caregiving environment)	36.00	25.00	36.35	3.95
Support Variables				
Pre. Div. H. Labor (% spousal participation)	2%	14%	29%	18%
Post. Div. H. Labor (% spousal participation)	0%	18%	30%	22%
Childcare Routines (% spousal participation)	*	19%	30%	12%
Prenatal SSNQ (frequency of support)	11.50	8.00	12.85	5.87
Postnatal SSNQ (comprehensiveness of support)	42.00	*	41.02	14.62
Infant Variables				
I.C.Q. Total	26.00	47.00	36.765	9.087
I: Fussy/Difficult	17.00	24.00	18.10	5.33
II: Unadaptable	6.00	7.00	8.00	3.04
III: Dull	-3.00	3.00	.45	2.09
IV: Unpredictable	6.00	13.00	9.10	2.43

Note. * indicates questionnaire was incomplete.

APPENDIX K

QUANTITATIVE SCORES OF TWO WOMEN OF THE PERSONAL PROFILES

Table 36. Bonnie and Jane's Quantitative Scores Compared to Means of the Late-timing Sample

Maternal Variables	Bonnie's Scores	Jane's Scores	Group Means	S.D.
Prenatal Interview Question #29 (looking forward to motherhood)	5.00	3.00	4.16	.83
Prenatal Interview Question #33 (feeling prepared for the baby)	3.00	4.00	3.45	.89
MSI (Total) (maternal self-esteem)	102.00	76.00	108.50	16.32
HOME (Total) (quality of the caregiving environment)	39.00	30.00	36.35	3.95
Support Variables				
Pre. Div. Household Labor (% spousal participation)	44%	27%	29%	18%
Post. Div. Household Labor (% spousal participation)	19%	8%	30%	22%
Childcare Routines (% spousal participation)	25%	31%	30%	12%
Prenatal SSNQ (frequency of support)	11.00	12.00	12.85	5.87
Postnatal SSNQ (comprehensiveness of support)	49.00	31.17	41.02	14.62
Infant Variables				
I.C.Q. Total	37.00	60.00	36.765	9.087
I: Fussy/Difficult	19.00	32.00	18.10	5.33
II: Unadaptable	5.00	14.00	8.00	3.04
III: Dull	2.00	0.00	.45	2.09
IV: Unpredictable	11.00	14.00	9.10	2.43

APPENDIX L

INFORMED CONSENT FORM

I agree to participate in the research study conducted by Georgia McMahon, a doctoral candidate in the School of Education at the University of Massachusetts. I understand that the research involves the study of the transition to parenthood for later-timing parents. I understand that it will involve two interviews, each lasting approximately one and a half hours, and a few brief questionnaires. I agree to have the researcher come to my home to observe the environment after the baby is born. I will try to keep a journal of my thoughts, feelings, and experiences during the study period.

I have been assured that any information that I offer will be kept strictly confidential. All names and identifying references will be changed. I understand that the interview will be tape recorded and that all audio tapes will be erased at the completion of the study. The tapes will be transcribed either by the researcher or by a trusted employee. Anonymity and confidentiality are assured.

I understand that results of the research will be made available to me, and that I may also have access to the dissertation or other written materials derived from this study at its conclusion.

I am aware that there is no monetary compensation for participation in or publication of this research.

I have read the foregoing statements, and discussed them to my satisfaction with Georgia McMahon. She has also answered all of my questions about the study. I agree to participate in the study.

Date:_____ Signature of Participants

Mother: _____

Father: _____

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